UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

THE ERICA P. JOHN FUND, INC., et al., *On Behalf of Itself and All Others Similarly Situated,* Plaintiff, vs. HALLIBURTON COMPANY and DAVID J. LESAR, Defendants.	**CIVIL ACTION NO.: 3:02-CV-1152-M** **CLASS ACTION**

APPENDIX IN SUPPORT OF
MOTION TO EXCLUDE EXPERT TESTIMONY OF LUCY ALLEN

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Additional counsel appear on signature page

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Dated: October 30, 2014

Respectfully submitted,

/s/ Carl E. Goldfarb

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on October 30, 2014, I served the attached document via CM/ECF System to the following counsel of record.

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

THE ERICA P. JOHN FUND, INC., et al., *On Behalf of Itself and All Others Similarly Situated*,

Plaintiff,

vs.

HALLIBURTON COMPANY and DAVID J. LESAR,

Defendants.

CIVIL ACTION NO.: 3:02-CV-1152-M

CLASS ACTION

DECLARATION OF CARL E. GOLDFARB IN CONNECTION WITH
LEAD PLAINTIFF'S PRICE IMPACT MEMORANDUM

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I, Carl E. Goldfarb, hereby declare as follows:

1. I am an attorney duly licensed to practice law in the State of Florida and am a partner with the law firm of Boies, Schiller & Flexner, LLP, Lead Counsel for the Plaintiff and the Class. I am admitted in this case pro hac vice. The matters stated herein are based on my personal knowledge and, if called upon to testify, I could and would testify competently thereto.

2. Attached hereto at Appendix 004-138 is a true and correct copy of the 10/30/2014 Export Report of Chad Coffman.

3. Attached hereto at Appendix 139-288 is a true and correct copy of the 09/10/2014 Expert Report of Lucy Allen.

4. Attached hereto at Appendix 289-405 is a true and correct copy of the 09/22/2014 Deposition of Lucy Allen.

5. Attached hereto at Appendix 406-407 is a true and correct copy of an Excerpt of an Excerpt of Halliburton's 1st Quarter 2001 SEC Form 10Q.

6. Attached hereto at Appendix 408-409 is a true and correct copy of an Excerpt of an Excerpt of Halliburton's 2001 SEC Form 10K.

7. Attached hereto at Appendix 410-411 is a true and correct copy of a December 4, 2001 Merrill Lynch Analyst Report.

8. Attached hereto at Appendix 412-413 is a true and correct copy of a December 7, 2001 Jeffries & Co. INC. Analyst Report.

9. Attached hereto at Appendix 414 is a true and correct copy of a December 7, 2001 PNCAdvisors Analyst Report.

10. Attached hereto at Appendix 415-417 is a true and correct copy of a December 7, 2001 Salomon Smith Barney Analyst Report.

11. Attached hereto at Appendix 418-419 is a true and correct copy of a December 7, 2001 UBS Warburg Analyst Report.

12. Attached hereto at Appendix 420-421 is a true and correct copy of a December 10, 2001 ABN AMRO Analyst Report.

13. Attached hereto at Appendix 422-424 is a true and correct copy of a December 10, 2001 RBC Capital Markets Analyst Report.

14. Attached hereto at Appendix 425-426 is a true and correct copy of a December 11, 2001 Bear Stearns Analyst Report.

15. Attached hereto at Appendix 427-428 is a true and correct copy of SCA00193552-53.

16. Attached hereto at Appendix 429-430 is a true and correct copy of a December 10, 2001 UBS Warburg Analyst Report.

FURTHER DECLARANT SAYETH NOT.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct and that I executed this declaration on October 30, 2014 in Fort Lauderdale, Florida.

s/Carl E. Goldfarb
CARL E. GOLDFARB

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

THE ARCHDIOCESE OF MILWAUKEE SUPPORTING FUND, INC., *On Behalf of Itself and All Others Similarly Situated,* Plaintiff, v. HALLIBURTON COMPANY, et al., Defendants.	CIVIL ACTION NO. 3:02-CV-1152-M

EXPERT REPORT OF CHAD COFFMAN, CFA

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I. INTRODUCTION

1. My name is Chad Coffman. I am the President of Global Economics Group, a Chicago-based firm that specializes in the application of economics, finance, statistics, and valuation principles to questions that arise in a variety of contexts, including, as here, in the context of litigation.

2. I have been asked by counsel for the Lead Plaintiff in this matter to review and respond to the expert report of Lucy Allen,[1] focusing on her arguments regarding price impact, and to offer my own opinion as to whether there is economic evidence that the alleged misrepresentations and omissions, if true, impacted Halliburton's stock price.

3. The materials I have relied upon in forming my opinions are summarized in **Appendix A**.

4. Global Economics Group is being compensated at an hourly rate of $575 per hour for my work on this matter and my compensation is in no way contingent on the outcome of this case. My qualifications are described below.

II. QUALIFICATIONS

5. I hold a Bachelor's Degree in Economics with Honors from Knox College and a Master's in Public Policy from the University of Chicago. I am also a CFA charter-holder. The CFA, or Chartered Financial Analyst, designation is awarded to those who have sufficient practical experience and complete a rigorous series of three exams over three years that cover a wide variety of financial topics including financial statement analysis and valuation.

[1] Expert Report of Lucy P. Allen ("Allen Report"), filed September 10, 2014.

6. I, along with several others, founded Global Economics Group in March 2008.[2] Prior to founding Global Economics Group, I was employed by Chicago Partners for over twelve years where I was responsible for conducting and managing analysis in a wide variety of areas including securities valuation and damages, labor discrimination and antitrust. I have been engaged numerous times as a valuation expert both within and outside the litigation context. My experience in class action securities cases includes work for plaintiffs, defendants, D&O insurers and prominent mediators to provide economic analysis and opinions in dozens of securities class actions or other matters. As a result of my experience, much of my career has been spent analyzing how quickly and reliably, and the degree to which, information impacts securities prices.

7. My qualifications are further detailed in my curriculum vitae, which is attached as **Appendix B**.

III. SUMMARY OF OPINIONS

8. After having reviewed the Complaint,[3] the Allen Report, other materials in this case, and based on an understanding from counsel for Lead Plaintiff as to the scope of the class for which they will seek certification, there are six relevant events in this matter on which to evaluate price impact. These events are summarized below, including noting the source of the claim that corrective information was potentially released:

[2] Global Economics Group was formerly known as Winnemac Consulting, LLC.

[3] "Fourth Consolidated Amended Complaint for Violation of the Securities Exchange Act of 1934," filed April 4, 2006 ("Complaint").

Asbestos Corrective Disclosures	*Summary Description of Corrective Event*
June 28, 2001	Halliburton disclosed that Harbison-Walker asked for asbestos claims related financial assistance from Halliburton (Complaint at ¶ 170).
August 9, 2001	2Q01 10-Q included additional details regarding asbestos claims (Complaint at ¶ 178).
October 30, 2011	Halliburton issued a press release announcing the Mississippi verdict (Halliburton 8-K).[4]
December 4, 2001	Halliburton announced Texas judgment and three other judgments (Complaint at ¶ 191).
December 7, 2001	Halliburton announced Maryland verdict (Complaint at ¶ 191).

Accounting Corrective Disclosure	*Summary Description of Corrective Event*
December 21, 2000	Halliburton announced a $120 million charge which included $95 million in project costs, some of which allegedly should not have been previously booked (Complaint at ¶ 150).

9. Event study analysis provides evidence that the market responded significantly to each of these six events. The Allen Report incorrectly asserts that all but one of these movements in Halliburton's stock price are not statistically significant based on her application of an event study analysis. Two fundamental flaws in her event study approach lead her to reach precisely the wrong conclusion for most of the relevant alleged corrective disclosures.

i. The first fundamental flaw in Ms. Allen's event study analysis is her demonstrable failure to sufficiently control for stock price movements in Halliburton's specific industry and therefore her model suffers from omitted variable bias.[5] By simply including in her model an index of peer companies

[4] Halliburton 8-K filed November 7, 2001.

[5] Omitted variable bias refers to the error that occurs from failing to control for an important determinant of the variable of interest. It is widely recognized that omitted variable bias often results in drawing inappropriate statistical conclusions. *See*, Damodar N. Gujarati, *Basic Econometrics*, Third Edition, 1995, pp. 456-458.

identified by securities analysts, I dramatically and significantly increase the explanatory power of her event study. This change alone suggests that both December 4 and December 5, 2001 (the two days following Halliburton's disclosure of multiple Texas judgments) yield statistically significant price declines in Halliburton stock at the 95% confidence level – contrary to what her model shows.

ii. The second fundamental flaw in Ms. Allen's event study approach is that even though her traditional event study approach implies there was a statistically significant reaction in Halliburton's stock price on many of the corrective disclosures, Ms. Allen asserts the need for a "statistical correction" for "multiple comparisons" which she claims allows her to conclude that those price movements do not actually rise to the level of statistical significance. In this context, such a "correction" is novel, unnecessary, and yields erroneous results. Her method requires that a stock price movement on a particular day to be statistically significant at greater than 99% confidence instead of the typical 95% or 90% thresholds. Adoption of this flawed approach has profound implications for her overall opinion.

iii. Even if such a correction were necessary, which it is not, Ms. Allen selects the most aggressive correction technique that maximizes the possibility of Type II error (the probability of falsely saying there was not a price reaction). A more appropriate "correction" confirms that there is evidence of statistically significant price reactions to all but one of the corrective disclosures with a one-day window and for all six of the corrective disclosures with a two-day window.

10. The Allen Report acknowledges that, even under her flawed "correction" for multiple comparisons, Halliburton's stock price falls by a statistically significant amount on December 7, 2001 when Halliburton made its third negative asbestos litigation disclosure in less than two months. Nevertheless, Ms. Allen opines that "Halliburton's stock decline at the end of the class period was attributed to an increase in uncertainty and the change in the economic and asbestos environment that also affected other companies,"[6] thus suggesting that the stock price decline on December 7, 2001 occurred for reasons other than new information about Halliburton's exposure to asbestos liability. However, upon oral examination, Ms. Allen concedes that she is not offering the opinion that these other factors are capable of explaining all of the stock price decline on December 7, 2001.[7] In addition, her "analysis" on this score is incomplete, misleading, and simply cannot support the notion that factors other than newly disclosed information about Halliburton's exposure to asbestos liability caused the statistically significant stock price decline on December 7, 2001.

i. The Allen Report compares Halliburton's raw dollar change in market capitalization with other asbestos companies' raw changes in market capitalization over the December 7-10, 2001 period.[8] Comparing raw dollar changes is inconsistent with her event study analysis which analyzes relative (percentage) changes, and further investigation demonstrates that these comparisons are incomplete and misleading.[9] In fact, the relative decline in

[6] Allen Report at X.A.6.

[7] Deposition of Lucy Allen, September 22, 2014 ("Allen Deposition"), pp. 186:5 – 191:9.

[8] Since December 8 and December 9, 2001 fall on a weekend, this amounts to Ms. Allen focusing on a two-day window following the corrective news on December 7, 2001.

[9] Technically, the event study in the Allen Report analyzes "log" changes in Halliburton's stock price rather than "percentage" changes. Log changes are a close approximation to percentage changes for

Halliburton's stock price is far larger than any of the other asbestos companies she identifies.

ii. Furthermore, when evaluating the extent to which other "asbestos companies" exhibit a stock price decline following Halliburton's December 7, 2001 announcement, Ms. Allen selectively chooses to compare Halliburton's price decline to only three of the 31 companies in her "asbestos index". I show that using either Ms. Allen's raw dollar changes or the appropriate percentage changes, Ms. Allen's other asbestos companies do not remotely exhibit "similar" price declines to Halliburton's decline on December 7, 2001.

iii. Moreover, Ms. Allen fails to statistically test her assertion that observed price changes in other asbestos companies can explain a substantial portion of Halliburton's stock price decline. This is despite having already constructed an event study with an asbestos index control variable which would easily allow her to do so. She could have relied upon this model to discern the portion of Halliburton's December 7, 2001 stock price movement explained by movements in these companies. As I demonstrate, such an analysis shows that her "asbestos index" explains less than 4% of Halliburton's total abnormal stock price movement on December 7, 2001.[10] In other words, Ms. Allen's own data and model suggest 96% of the abnormal return on December 7, 2001 *cannot be explained by movements in her asbestos index*.

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relatively small changes. For example, a log change of .05 is approximately equal to a change of 5.1 percent. For expositional ease I may, as here, refer to percentage changes with the understanding that, where relevant, I am really referring to the "log" changes.

[10] By "abnormal stock price movement" I am referring to the price movement after controlling for the market indices included in the model.

iv. Ms. Allen shows that Halliburton stock options have a greater implied volatility after December 7, 2001 and suggests this "uncertainty" explains the stock price decline. Greater implied volatility in Halliburton's stock price after December 7, 2001 is *not* a confounding factor, but rather a reflection of the impact of the corrective information itself.

v. Ms. Allen further argues that greater uncertainty in the general economy in the wake of the Enron Bankruptcy is another possible alternative cause of Halliburton's abnormal price decline on December 7, 2001.[11] Once again, however, Ms. Allen fails to formally evaluate this explanation even though the data to do so are either already in her report or widely available. Her assertions about market-wide volatility and the influence of the Enron bankruptcy are not borne out by any actual analysis and, in fact, are inconsistent with contemporaneous measures of market-wide and firm-specific volatility, which she ignores.

vi. Likewise, Ms. Allen's appeal to an increase in volatility in other asbestos companies following December 7, 2001 is based on an incomplete and misleading analysis of her data, whereby she selects only a handful of specific companies as comparisons and then loosely interprets the data. A more complete analysis easily shows that increases in implied volatility of the other companies in her asbestos index are unable to explain Halliburton's stock price movement or increase in implied volatility. Furthermore, her regression already implicitly controls for this effect.

[11] Allen Report at ¶¶ 229-245.

11. The market price declines in Halliburton stock that occur on the alleged asbestos corrective disclosures demonstrate price impact.

i. If a firm engages in fraudulent understatement of its exposure to asbestos liabilities, one foreseeable method by which such a fraud will come to light is through adverse litigation outcomes.

ii. The fact that the market price reactions to Halliburton's adverse litigation outcomes far exceed the financial value of the specific cases implies the market is placing additional predictive value on these outcomes and reflects corrective learning on the part of the market. In other words, the adverse litigation outcomes provided corrective information by directly raising expectations about the expected cost to settle/litigate pending claims and rationally increased expectations about the number of future claims, which Plaintiffs allege had been concealed by the misstatements and omissions.

iii. The Allen Report also provides compelling statistical and economic proof that the market viewed Halliburton as an "asbestos company" starting December 7, 2001, but not before – which actually supports Plaintiffs' theory that the newly disclosed information, released on December 7, 2001, is indeed what caused the market price to reflect that it no longer relied on the alleged misrepresentations. In other words, there is strong economic and statistical evidence that on December 7, 2001 the market further incorporated the relevant economic truth concealed by the misrepresentations and omissions: that Halliburton faced substantial and material asbestos liabilities. Properly interpreted, the statistical evidence in the Allen Report provides strong evidence for, rather than refuting, price impact.

iv. The combination of these factors strongly suggest that the alleged corrective disclosures were viewed by the market as newly disclosed information that changed its impression of Halliburton's asbestos liabilities in a way that was inconsistent with the prior alleged misrepresentations and omissions and supports a finding of price impact.

12. Ms. Allen also argues for a lack of price impact by attempting to characterize the new information released as not corrective of the alleged fraud. Ms. Allen provides no sound economic analysis or reliable evidence to support the lack of a correction.

i. Ms. Allen never articulates why a series of adverse asbestos litigation outcomes cannot serve as corrective information when the allegation is that the company was fraudulently concealing its exposure to potential asbestos liabilities.

ii. Ms. Allen argues that the newly disclosed information is not corrective because analysts did not suggest that they had previously been misled, but then acknowledges in her deposition that it is not necessary for analysts to state that they were misled in order to have a corrective disclosure.

iii. Ms. Allen's explicit reliance on the reports of certain analysts (but not others), while ignoring the objective economic evidence provided by the market price reaction is not a valid or recognized approach to evaluating the economic import of new information.

iv. Disclosure of "risk factors" does not preclude either misstatements or omissions of material fact or newly disclosed information about litigation developments from being corrective.

v. Ms. Allen ignores the corrective information on August 9, 2001, focusing instead on previously disclosed information, and without application of her inappropriate "multiple comparisons" correction, she acknowledges Halliburton's stock price reacted significantly.

vi. Furthermore, Ms. Allen claims that some (but not necessarily all) of Halliburton's price drop on August 9, 2001 is due to confounding news, but she fails to perform any analysis that would disaggregate the portion of the abnormal price drop that is due to the confounding news. Thus, there is reason to believe that at least some of the observed price decline is due to the allegedly corrective information.

vii. Ms. Allen's conclusion that there was no statistically significant reaction to the June 28, 2001 disclosure regarding Halliburton's need to support Harbison-Walker is incorrect. Her own analysis shows there was a statistically significant price response prior to her erroneous "correction" for multiple comparisons. Her arguments as to why the information is not corrective are either irrelevant or wrong.

13. There is evidence of price impact with respect to Plaintiffs' accounting claims.

i. The December 21, 2000 write-off of previously booked revenue for unapproved claims that Plaintiffs allege should not have been booked in the first place is clearly corrective of the alleged fraud.

ii. There is a statistically significant stock price decline over the two-day window following the release of corrective information. There is also evidence of

a significant intraday stock price movement on December 21, 2000. As a result, there is evidence of price impact.

iii. Ms. Allen fails to provide an alternative reason for Halliburton's stock price decline on those days and has provided insufficient evidence to rule out price impact. Analysts and news articles indicated that the allegedly corrective information was surprising negative news. Therefore at least some of the decline must be due to the allegedly corrective information.

14. The remainder of this report is organized as follows: **Section IV** sets out the relevant alleged misstatements, omissions, and corrective disclosures analyzed in this report; **Section V** reviews the event study analysis presented in the Allen Report, including the asserted need to "correct" for multiple comparisons, and demonstrates evidence of statistically significant stock price reactions following the alleged corrective disclosures; **Section VI** explains why the Allen Report's event study and other statistical analyses fail to show a lack of price impact on December 7, 2001; **Section VII** provides my affirmative opinion that there is price impact stemming from the alleged asbestos misrepresentations and omissions. **Section VIII** refutes Ms. Allen's arguments that the information released on the corrective disclosure events was not corrective; **Section IX** explains that there was price impact with regard to the June 28, 2001 alleged corrective disclosure; **Section X** discusses the evidence that there was price impact coinciding with the August 9, 2001 disclosure; **Section XI** reveals why other arguments presented in the Allen Report regarding the price impact from asbestos misrepresentations and omissions are not convincing; and **Section XII** specifically addresses why there is evidence of price impact attributable to Plaintiffs' accounting claims and refutes Ms. Allen's arguments on that subject.

15. I reserve the right to amend this report to reflect any new information that becomes available to me.

IV. THE RELEVANT ALLEGED MISSTATEMENTS, OMISSIONS, AND CORRECTIVE DISCLOSURES

16. To properly evaluate whether the alleged asbestos related corrective disclosures provide evidence of price impact, I start from the presumption that Plaintiffs' asbestos related claims are true. In other words, I assume that Defendants made material misrepresentations or omissions with scienter regarding Halliburton's exposure to asbestos liabilities. Plaintiffs allege that Defendants misrepresentations and omissions caused the market to underestimate Halliburton's exposure to asbestos related liabilities and therefore artificially inflated the market price of Halliburton common stock.

17. For purposes of my analysis, I presume that Plaintiffs' allegations regarding materiality, falsity, and scienter are true. Because it is my understanding that it was established earlier in the case, I also presume that the market for Halliburton common stock was efficient during the Class Period.

18. From an econometric standpoint where, as here, the question is whether the price of the security was artificially maintained during the class period due to misrepresentations and omissions, the impact on the price of that security (the "impact" equating to distorting effect) will be the same irrespective of whether the information causing that artificial maintenance of the price is a misrepresentation or omission. This is because prices of securities that trade in an efficient market only move (up or down) in response to new unexpected publicly disseminated material information.

19. If a public misrepresentation provides only expected information, the price of the security will not materially react. If new unexpected materially adverse non-public information concerning the subject is withheld, that omission will also not impact the price of the security. Accordingly, from an econometric standpoint, whether the subject information is an affirmative misrepresentation or an omission, the directional impact on the price (*i.e.*, the distorting effect) will be the same, *i.e.*, maintaining the price at an artificially high or low level. In either event, upon the revelation of the true facts which change the market's assessment of the subject security's value, the market price will rise or fall to reflect the value of the concealed information. This demonstrates a price impact from the prior misrepresentation or omission.

20. I understand that Plaintiffs do not assert that Halliburton's stock price was artificially inflated by positive movements in the price when new unexpected material misrepresentations were made. Rather, with respect to the asbestos claims, I understand Plaintiffs allege that the market price for Halliburton was artificially inflated during the Class Period when Defendants issued materially false and misleading statements and omitted material information regarding, *inter alia*, Halliburton's liability for pending asbestos claims, the inadequacy of its asbestos reserves, its potential liability for asbestos claims against Harbison Walker, a former subsidiary of Dresser, and its liability for potential claims generally. Assuming Plaintiff's allegations on these misstatements and omissions are true, this created a difference between Halliburton's actual price and the price Halliburton's stock would have been but-for Defendants' misrepresentations and omissions regarding its asbestos liability. Had investors known the truth regarding Halliburton's asbestos exposure, the market price for Halliburton stock would have been lower.

21. Similarly, with respect to Plaintiffs' accounting claims, rather than asserting that there was artificial inflation introduced by price increases that resulted from the introduction of new and unexpected material misinformation, I understand that Plaintiffs allege that the market price for Halliburton was artificially inflated during the Class Period when, Defendants, *inter alia*, recognized revenue for unapproved claims on fixed-price contracts in violation of GAAP and SOP 81-1 because the unapproved claims revenue was not probable of collection and/or could not be reliably estimated. Assuming Plaintiffs' allegations regarding these misstatement and omissions are true, this created a difference between Halliburton's actual price and but-for price after such revenue was booked. In other words, the market price was maintained on that day, but would have been lower had Halliburton's reported revenue reflected that the collectability of these amounts was not probable.

22. I do not address price impact regarding Plaintiffs' allegations related to the integration of Dresser.

23. Counsel for Lead Plaintiff has identified the relevant misstatements and omissions for me to consider and they are identified in **Appendix C**.

24. Based upon my review of the Complaint, the misstatements and omissions identified in **Appendix C**, the Allen Report, and all of the other material in this matter, the relevant events to evaluate for price impact include the following six corrective disclosures:

Asbestos Corrective Disclosures	*Summary Description of Corrective Event*
June 28, 2001	Halliburton disclosed that Harbison-Walker asked for asbestos claims related financial assistance from Halliburton (Complaint at ¶ 170).
August 9, 2001	2Q01 10-Q included additional details regarding asbestos claims (Complaint at ¶ 178).
October 30, 2011	Halliburton issued a press release announcing the Mississippi verdict (Halliburton 8-K).
December 4, 2001	Halliburton announced Texas judgment and three other judgments (Complaint at ¶ 191).
December 7, 2001	Halliburton announced Maryland verdict (Complaint at ¶ 191).

Accounting Corrective Disclosure	*Summary Description of Corrective Event*
December 21, 2000	Halliburton announced a $120 million charge which included $95 million in project costs, some of which allegedly should not have been previously booked (Complaint at ¶ 150).

V. CONTRARY TO MS. ALLEN'S FINDINGS, THERE WERE STATISTICALLY SIGNIFICANT DECLINES IN HALLIBURTON'S STOCK PRICE FOLLOWING EACH OF THE ALLEGED CORRECTIVE DISCLOSURES

A. MS. ALLEN'S EVENT STUDY DOES NOT APPROPRIATELY CONTROL FOR HALLIBURTON'S INDUSTRY

25. The Allen Report contains an event study which purports to evaluate whether there were statistically significant changes in Halliburton's stock price after controlling for market and industry effects on the alleged corrective disclosure events. A typical event study controls for market and industry effects by using a regression to model how changes in one or more market indices typically affect the security of interest (in this case, Halliburton common stock).[12] As

[12] Allen Report at n. 17 and n. 18.

described in the Allen Report, performing this regression requires the specification of an estimation window and the indices that will be used as controls.[13]

26. For her estimation window, Ms. Allen uses the Class Period excluding the 35 dates she selects to test.[14] In other words, she estimates a regression model using June 3, 1999 to December 6, 2001 (excluding the test dates) as her "control" period where she investigates how the market indices she chooses are able to explain movements in Halliburton's stock price. I have no objection to Ms. Allen's selection of the estimation window.[15]

27. Ms. Allen selects two indices to serve as the controls in her event study "to adjust for movement in Halliburton's industries. . . "[16] The two indices she selects are the S&P 500 Energy Index (which purports to control for industry-wide factors in Halliburton's Energy Services line of business), and what she calls a "Fortune E&C Index" (which purports to control for industry-wide factors in Halliburton's Engineering and Construction line of business).[17]

28. As Ms. Allen notes, the S&P 500 Energy Index is a value-weighted index of companies against which Halliburton compares its own performance in its post-Class Period 10-

[13] Allen Report at ¶¶ 19-21.

[14] Allen Report at n. 23.

[15] In order to investigate whether her choice of the Class Period as an estimation window was appropriate, I reviewed the results of her regression in detail and also performed her analysis using a shorter estimation window (120 trading days, or roughly six months) prior to each date being tested. This is a method I often use in my work and also supported by the academic literature (*See*, for example, Phillip A. Braun, Daniel B. Nelson, and Alain M. Sunier, "Good News, Bad News Volatility, and Betas," *Journal of Finance* 50, No. 5, 1995, p. 1597). Using this shorter estimation window did not materially impact the results and suggests there is no bias in her choice of an estimation window.

[16] Allen Report at ¶ 20.

[17] I note that Ms. Allen fails to include a broad market index like the S&P 500 in her event study regression, but her selected industry indices (which are quite broad) seem to be fully capturing the broad market effect since addition of the S&P 500 does not meaningfully change the results.

K filings with the SEC.[18] There is nothing inherently wrong with including this index in the regression, but because it is a fairly broad index, it may not be a sufficient control for Halliburton's specific industry. For example, consider **Exhibit 1**, which identifies and shows the weight of the companies in the S&P 500 Energy Index at the end of the Class Period. The top 3 companies, Exxon, Royal Dutch Petroleum, and Chevron, represent over 72% of the index.[19] These companies are petroleum refining companies, not energy services companies like Halliburton.[20] As a result, the S&P 500 Energy Index Ms. Allen relies on is primarily an oil company index, *not an energy services index*.[21]

29. Now, it is not at all surprising such an index has *some* explanatory power for Halliburton's stock price movements since these companies are important customers of Halliburton and also reflect the broader equity market as a whole, but it is also true that changes in the value of oil company stocks could, and likely do, depend on factors that do not affect Halliburton and vice versa. There is no explicit acknowledgement or analysis of this feature of

[18] Allen Report at n. 19.

[19] These weights are taken directly from the backup material provided by Ms. Allen ("Allen Report Backup Material") and are the weights she uses in her event study for the last day in the Class Period. While the weights change slightly over time, the same general pattern exists on every day during the Class Period. For example, on the first day of the Class Period these companies represent 58% of the index and they range between 56% and 73% of the index in Ms. Allen's analysis.

[20] In its FY 2001 10-K filed on March 27, 2002, Exxon describes its principal business as "energy, involving exploration for, and production of, crude oil and natural gas, manufacture of petroleum products and transportation and sale of crude oil, natural gas and petroleum products." Compare this to Halliburton, which describes its energy business in its FY 2001 10-K filed March 12, 2002 as providing "a wide range of discrete services and products, as well as integrated solutions to customers for the exploration, development and production of oil and gas." From this description, companies like Halliburton are in the business of working with and helping companies like Exxon, but they are not peers or competitors.

[21] Indeed, including the other petroleum refining and crude petroleum and natural gas companies in the total shows that over 90% of the index is made up of what are generally considered oil companies or oil exploration and production companies on the last day of the Class Period. This ranges from 87% to 93% over the Class Period.

the S&P Energy Index in the Allen Report, nor does the Allen Report suggest that she tested alternative methodologies for selecting or constructing this index.

30. To determine whether Ms. Allen's selected index sufficiently controls for Halliburton's more specific industry, I reviewed the reports issued by securities analysts covering Halliburton during the Class Period to determine which companies analysts explicitly identify as Halliburton's peers.[22] This is a method for constructing an industry index that is well-accepted in the academic literature, including articles cited by Ms. Allen.[23] Furthermore, Ms. Allen agreed at her deposition that this is generally a valid approach for constructing an industry index.[24] She also specifically considers such an approach when constructing the index to control for Halliburton's Engineering and Construction business.[25]

31. **Exhibit 2** displays a bar for each of the companies mentioned explicitly by securities analysts during the Class Period as a competitor or peer company. The size of each bar indicates the number of times these peer companies were explicitly mentioned as a competitor or peer. Exhibit 2 shows Schlumberger and Baker Hughes were the two firms analysts discussed far more than any others and they were clearly considered Halliburton's closest peers:

> HAL is aggressively addressing a problem area and attempting to remove an overhang on the stock that has caused it to underperform its direct peers (Baker Hughes – BHI and Schlumberger – SLB).[26]

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[22] To perform this analysis I relied upon the universe of Halliburton analyst reports issued during the Class Period that Ms. Allen identified in her "Appendix B: Materials Considered" and "Appendix B-1: Materials Considered". I limit Exhibit 2 to firms publicly traded on U.S. exchanges and with at least 3 explicit mentions over the Class Period.

[23] For example, David I. Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," Ch. 19, *Litigation Services Handbook, The Role of the Financial Expert*, Third Edition, 2001, pp. 6-7.

[24] Allen Deposition, p. 36:8-15.

[25] Allen Report at n. 20.

[26] 'Halliburton," *A.G. Edwards*, February 20, 2001, p. 8.

> This surge in margins finally puts Halliburton's oilfield services margins in the same ballpark as its two principal competitors – Baker Hughes and Schlumberger.[27]

32. This is consistent with Bloomberg which cites Schlumberger and Baker Hughes as Halliburton's two main competitors,[28] and is further supported by how the Company discussed its competitors.[29] Compare this to **Exhibit 3a**, which shows the weights of Schlumberger and Baker Hughes in Ms. Allen's S&P 500 Energy Index, highlighting that Halliburton's closest peers only represent 6.2% of the index as of the end of the Class Period.[30] Said another way, firms other than Halliburton's closest competitors make up more than 93% of Ms. Allen's industry control.

33. Based on the companies shown in Exhibit 2, I constructed a value-weighted index comprised of the companies cited by analysts as Halliburton's peers at least three times during the Class Period and with a market cap of at least $1 billion at the end of the Class Period (the "Industry Peer Index"). **Exhibit 3b** shows the weights this index has as of the end of the Class Period, with Schlumberger and Baker Hughes representing over half the index and a variety of other energy services companies comprising the remainder.

34. On its face, the Industry Peer Index would appear to be the more appropriate control for a Halliburton event study given its composition and the process by which it was composed. Fortunately there are statistical tests which indicate whether adding the Industry Peer Index,

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[27] "Halliburton," *UBS Warburg*, October 24, 2001, p. 2.

[28] Bloomberg Peer Comparison is Bloomberg's proprietary algorithm and is based on numerous relationships such as analyst coverage, correlated news stories, and industry classification.

[29] "Overall, our Halliburton Energy Services revenues in the first quarter declined by 9% sequentially compared to 9% (SLB), 9% (BHI), 13% (BJ) and 7% (SII) for our primary energy service competitors." Halliburton's First Quarter 2002 Earnings Release Conference Call, May 6, 2002, p. 2.

[30] This percentage ranges between 5.6 % and 8.6% throughout the Class Period.

which clearly differs in substantial ways from the broader index selected by Ms. Allen, adds statistical power to the regression model and if such a model can better explain the movements in Halliburton's stock price. The table below summarizes the results of the two regression models, comparing Ms. Allen's regression with a model where I have simply added the Industry Peer Index to her regression model:[31]

Comparison of Regression Statistics

Allen Regression

Regression Statistics	
R Square	0.4949
Adjusted R Square	0.4932
RMSE	0.0228

	Coefficient	*Standard Error*	*t-Stat*	*p-value*
Intercept	-0.0001	0.0009	-0.0911	0.9275
S&P Energy Index	1.3769	0.0591	23.3035	0.0000
Fortune E&C Index	0.1576	0.0567	2.7799	0.0056

Allen Regression (Including Industry Peer Index)

Regression Statistics	
R Square	0.7440
Adjusted R Square	0.7427
RMSE	0.0162

	Coefficient	*Standard Error*	*t-Stat*	*p-value*
Intercept	-0.0006	0.0007	-0.9742	0.3304
S&P Energy Index	0.2832	0.0620	4.5687	0.0000
Fortune E&C Index	0.1159	0.0404	2.8651	0.0043
Industry Peer Index	0.8538	0.0355	24.0391	0.0000

35. The increase in explanatory power from adding the Industry Peer Index is dramatic. First, and perhaps most importantly, the adjusted-R-squared statistic increases from 49% to 74%. This means that while Ms. Allen's regression explains 49% of the variance in Halliburton's stock price during the Class Period, simply adding the Industry Peer Index increases that figure to

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[31] That both the S&P Energy Index and Industry Peer Index contain some of the same companies has no impact on the validity of the regression. The risk of multicollinearity, where two control variables are highly correlated with each other, so that one predicts the other, is very low, even when there is some overlap in the companies used in the Energy Index and the Industry Peer Index. As stated in an article cited by Ms. Allen, "Obviously, the less multicollinearity is present, the better able one will be to separate out the effects of interest. Unless multicollinearity is perfect, however, multiple regression will be able to separate the effects to some extent and, again, will do so more precisely than any other method, producing estimates with the properties discussed above as well as measures of the reliability of these estimates. The effects of multicollinearity will show up in such reliability measures (standard errors), as discussed below." (Franklin M. Fisher, "Multiple Regression in Legal Proceedings," 80 Colum. L. Rev. 702 1980.) There is no evidence of severe multicollinearity in the regression analysis presented above as the t-statistics are statistically significant for all three predictor variables and the correlation between the Energy Index and Industry Peer Index is 0.736. Furthermore, when I explicitly remove the overlapping companies from Ms. Allen's S&P Energy Index, the difference in the results is negligible.

74%.[32] This is a significant difference that indicates adding the Industry Peer Index results in a far more predictive and explanatory model.[33]

36. Second, the Root Mean Squared Error (RMSE), which provides a metric for how much "randomness" remains after controlling for the market indices, is cut from .0228 to .0162. In other words, the prediction errors from the regression with the Industry Peer index included are, on average, much smaller in magnitude than the prediction errors from the Allen regression. This has important implications because the regression with the Industry Peer Index dramatically reduces the unexplained "randomness" in Halliburton's stock price and thus allows for a more powerful test for statistical significance. For example, under Ms. Allen's regression, there would need to be an unexplained log return of plus or minus 0.045 (or roughly 4.5%) to find statistical significance at the 95% confidence interval, while after including the Industry Peer Index this is reduced to a 3.2% change in price.[34] In other words, Ms. Allen's regression attributed 40% more of Halliburton's stock price volatility to "randomness" rather than industry effects when compared against the model that includes the Industry Peer Index.

37. Third, the "coefficient" shown in the table above measures the magnitude of the influence that the index has on Halliburton's stock price. This is often referred to as the "beta" of the stock with respect to an index. Comparing the results, once the Industry Peer index is

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[32] Ms. Allen cites an article by Tabak and Dunbar, stating, "When the estimation regression is run, one of the statistics generated is the adjusted R-squared…. The higher this statistic, the larger the portion of the variability explained. Moreover if the expert chooses one index with less statistical explanatory power than a second index, he or she should be prepared to defend this choice." David I. Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," Ch. 19, *Litigation Services Handbook, The Role of the Financial Expert*, Third Edition, 2001.

[33] An F-test shows that the regression with the Industry Peer Index is statistically significantly better at predicting Halliburton's returns than the Allen Regression (at greater than the 95% confidence level).

[34] Recall I am referring to percentages instead of "log changes" for ease of exposition though I recognize they are not precisely the same.

added, the coefficient on the Industry Peer Index is higher when compared against her other indices and the coefficients on her indices decline substantially. For example, the coefficient on the Industry Peer Index is .85, which indicates for every 1% change in the index, the model predicts Halliburton will move by 0.85%. One can statistically test (using what is known as a t-statistic) whether the relationship being measured is unlikely to occur by chance. The t-statistic greater than 24 on the Industry Peer Index indicates that Halliburton's correlation with the Industry Peer Index is statistically significant at greater than the 99.9999% confidence interval *even after controlling for the indices selected by Ms. Allen.* This provides strong statistical evidence that adding the Industry Peer Index is critical to properly analyzing changes in Halliburton's stock price and that Ms. Allen's regression suffers from omitted variable bias.[35]

38. I also note that the coefficients and t-statistics for the S&P Energy Index and Fortune E&C Index remain significant at the 95% confidence level; however both coefficients are lower than in Ms. Allen's regression and much lower than the Industry Peer Index. This result makes perfect economic sense. A more specific index focused on Halliburton's closest peers has a greater power to explain Halliburton's stock price movements, but a broader index dominated by oil production and exploration companies that include some of Halliburton's important customers still has some, but far less, explanatory power. The statistical analysis above demonstrates decisively that the event study in the Allen Report does not appropriately or effectively control for Halliburton's specific industry and suffers from omitted variable bias, meaning her event study regression did not include an important explanatory variable.

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[35] Omitted variable bias refers to the error that occurs from failing to control for an important determinant of the variable of interest. It is widely recognized that omitted variable bias often results in drawing inappropriate statistical conclusions. *See*, Damodar N. Gujarati, *Basic Econometrics*, Third Edition, 1995, pp. 456-458.

39. If an important explanatory variable is omitted from the regression model, the regression coefficients can be biased and inconsistent. Also, the standard errors and variance will be incorrectly measured. When this occurs, hypothesis testing can lead to misleading conclusions.[36] Here, when the Industry Peer Index is omitted, the coefficient on the energy index has a positive bias, overestimating the true importance of that index on Halliburton's stock price. Put another way, the Energy Index was being credited for influencing Halliburton's stock price when the Industry Peer Index was omitted. By contrast, if by chance the Industry Peer Index were an irrelevant variable, this would not result in incorrect standard errors and the regression parameters would remain unbiased and consistent.[37] Given that inclusion of a control for Halliburton's closest competitors and its method of construction are theoretically justified, as well as the statistical results indicating the additional index results in a better explanatory model, it is clear that the corrected Allen regression model with the Industry Peer Index is vastly superior to the one presented in the Allen Report.

B. APPROPRIATELY CONTROLLING FOR HALLIBURTON'S INDUSTRY PEER INDEX INDICATES THAT ALL ALLEGED CORRECTIVE DISCLOSURES RESULTED IN STATISTICALLY SIGNIFICANT PRICE MOVEMENTS

40. Ms. Allen's failure to appropriately control for Halliburton's specific industry has important implications for the results of her event study and ultimate opinions. **Exhibit 4a** summarizes the abnormal returns and a test for statistical significance on each of the relevant alleged corrective disclosures after inclusion of the Industry Peer Index.

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[36] Damodar N. Gujarati, *Basic Econometrics*, Third Edition, 1995, pp. 456-458.

[37] Damodar N. Gujarati, *Basic Econometrics*, Third Edition, 1995, pp. 458-459.

41. Included on Exhibit 4a are tests for statistical significance for both one day and two day event windows. Use of two-day event windows is observed widely in the literature and Ms. Allen herself focuses on a two-day window when comparing Halliburton's returns to other asbestos companies in the wake of the December 7, 2001 corrective disclosure.[38]

42. All six of the events have statistically significant returns over a two-day event window at greater than the 95% confidence interval. All but one event (December 21, 2000) has a statistically significant return over a one day window with greater than 95% confidence. As will be described later, there is also evidence that there is a significant intraday price decline on December 21, 2000. As a result, there is economic evidence of price impact on each corrective disclosure.

43. **Exhibit 4b** compares the results from Exhibit 4a with the results from the Allen Report. It is worth noting that with the exception of December 4, 2001, *the same qualitative result is arrived at from Ms. Allen's uncorrected event study regression.* In other words, Ms. Allen herself finds (prior to her "correction" for multiple comparisons) price changes that are statistically significant at the 95% confidence level over a two day window for five of the six corrective disclosure events. However, as a result of the omitted variable bias present in her model, she incorrectly fails to find a significant result on December 4, 2001.

C. MS. ALLEN'S "CORRECTION" FOR "MULTIPLE COMPARISONS" IN THIS CONTEXT IS NOVEL, UNNECESSARY, AND YIELDS ERRONEOUS RESULTS

44. As described above and shown on Exhibit 4a, with the exception of the December 4, 2001 disclosure, Ms. Allen's event study demonstrates that there was a statistically significant

[38] Allen Report at ¶ 242.

price reaction to the allegedly corrective information prior to her "correction" for "multiple comparisons." Ms. Allen asserts, however, that with the exception of the December 7, 2001 disclosure, these events are *not* statistically significant after adjusting for multiple statistical analyses (or "multiple comparisons").[39] Such a "correction" is neither standard nor statistically appropriate in this context.

45. In the context of performing event studies on securities prices, the standard approach among financial economists for determining the statistical significance of a particular event (whether testing one or multiple events) is to evaluate the probability of a Type I error *for that particular event* given the observed price movement and then comparing it to the relevant threshold (*e.g.*, 5% if we are using the 95% confidence threshold).[40] This is consistent with oft-cited academic literature on the topic of event studies.[41] Furthermore, in the academic articles cited in the Allen Report to support her event study methodology there are no corrections for "multiple comparisons."[42]

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[39] Allen Report Exhibit 1a.

[40] A Type I error is the probability of rejecting the null hypothesis of no impact even though it is true. A Type I error is also commonly referred to as a "false positive." *See* David Kaye and David Freedman, *Reference Guide on Statistics*, in *Reference Manual on Scientific Evidence, Third Edition*, Federal Judicial Center, 2011, p. 251, n.100.

[41] Fama, Fisher, Jensen, and Roll, "The Adjustment of Stock Prices to New Information," *International Economic Review*, Vol. 10, No. 1, 1969, pp. 1-21; Campbell, Lo, and MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, New Jersey, 1997, pp. 479-498; A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35, No. 1, 1997, pp. 13-39; Avner Kalay and Uri Lowenstein, "Predictable Events and Excess Returns: The Case of Dividend Announcements," *Journal of Financial Economics*, Vol. 14, 1985, pp. 423-449; Eugene Pilotte and Timothy Manuel, "The Market's Response to Recurring Events: The Case of Stock Splits," *Journal of Financial Economics*, Vol. 41, 1996, pp.111-127; Ray Ball and S.P. Kothari, "Security Returns Around Earnings Announcements," *The Accounting Review*, Vol.66, No. 4, 1991, pp. 718-738.

[42] *See* Allen Report n.17 and n.18: Janet C. Alexander, "The Value of Bad News in Securities Class Actions," *UCLA Law Review*, Volume 41, 1994 pp. 1421-1469; Robert G. Bowman, "Understanding and Conducting Event Studies," *Journal of Business Finance & Accounting*, Volume 10, Issue 4, 1983, pp. 561-584; Daniel R. Fischel, "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," *The Business Lawyer*, Volume 38, November 1982, pp. 1-20; A. Craig

46. I have been involved in reviewing, evaluating, and performing event studies in the context of class action securities cases for over 15 years. Between my experience as a consulting or testifying expert for plaintiffs, defendants, D&O insurance carriers, and in my extensive experience working for mediators where I have had multiple opportunities to review the analyses of other experts, I have been involved in well over a hundred cases. With the exception of one other matter, I cannot recall a single instance of an expert arguing that an adjustment for "multiple comparisons" should be applied as Ms. Allen suggests, let alone a consensus that it represents the appropriate approach.[43] As a result, I am confident in stating that what Ms. Allen advocates is not the standard or accepted approach in this context.

47. The lack of precedent for Ms. Allen's suggested approach is not because she has suddenly raised an issue that highly competent experts in a well-developed field have missed for many years; it is because what she suggests in not appropriate in this context. The apparent concern Ms. Allen is attempting to address here is that one should be skeptical of drawing inferences from data mining. A correction for multiple comparisons is appropriate when data is being tested at random, not when there is a clear theory and objective criteria for determining which data to test.

48. The event study analysis begins with the theory of semi-strong efficient markets, which is well-accepted as a theory that describes the functioning of stock prices on the national exchanges and recognizes that, contrary to the null hypothesis, we *expect* to observe stock price

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MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35, No. 1, 1997, pp. 13-39; David I. Tabak and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," Ch. 19, *Litigation Services Handbook, The Role of the Financial Expert*, Third Edition, 2001.

[43] That other matter was in the last two years and the method was advocated by a colleague of Dr. Allen's from NERA.

declines upon the revelation of negative news. This theory has been tested over and over again with great success. Second, the predicate assumption of the analysis both Ms. Allen and I are engaged in is that Defendants have intentionally withheld negative information from investors. Third, the dates analyzed were not randomly selected to data mine in search of anomalies from which to explain price movements. Instead, each day was specifically chosen because there was news related to the allegations, not because of a statistically significant price movement. Therefore, we have theory and specific evidence to predict a negative market reaction. We then ask the standard question of whether we can rule out chance on each of these days with high confidence (*e.g.*, 90% or 95%).

49. By applying the Bonferroni correction with 35 tests, Ms. Allen is requiring the price change on any given day to be significant at the 99.86% level rather than the standard 95% level. This is not the accepted and standard procedure in the economic literature and improperly raises the probability of Type II error (a false negative).[44]

50. Finally, in the specific context of this event study, six out of six events have statistically significant stock price movements. The notion that one should reject the standard statistical procedure in this context on account of concern for data mining and falsely identifying a spurious change in Halliburton's stock price is inconsistent with standard practice.[45]

[44] I note that the only article she appeals to which discusses making this correction in the context of looking at stock returns is an article by a colleague from NERA. This article is refuted by another academic article: John D. Finnerty, "A Closer Look at Correction for False Discovery Bias When Making Multiple Comparisons," *Journal of Forensic Economics*, Vol. 21, No.1, 2009, pp. 55-62.

[45] In more technical terms, Dr. Allen's correction starts from the assumption that the null hypothesis of no economic impact is jointly valid *on each and every day*. However, the remarkably powerful evidence against that joint null hypothesis on the corrective disclosure dates (many with large t-statistics such as -25.05, -2.95, -2.78, and -2.05 from Ms. Allen's poorly specified regression, -34.27, -3.01, -2.85, and -3.23 in the corrected version that includes the Industry Peer Index) renders her correction inappropriate because she substantially raises the possibility of Type II error (failing to reject the null even though it is false). Application of statistics requires balancing the possibility of Type I error with Type II error and her

51. In sum, there is no reason to reject the standard approach of evaluating the statistical significance of each date individually using an unadjusted threshold. Adopting Ms. Allen's approach would break from both practice and theory.[46] Ms. Allen's event study procedure creates a substantial and inappropriate bias against finding statistical significance of any event within the Class Period by setting too high a threshold of statistical significance.

52. To demonstrate the magnitude of the errors in her approach**, Exhibit 5** displays the abnormal returns for the six days of interest as well as the threshold for statistical significance for the Allen Regression, the Allen Regression plus the Industry Peer Index, and the Allen Regression with the Bonferroni Correction. Exhibit 5 shows that a much larger abnormal return is required to find statistical significance under Ms. Allen's regression, and the gap is larger still when Ms. Allen applies her threshold for multiple corrections. Using her threshold for statistical significance, only six out of 633, or less than 1%, of the days during the entire Class Period would qualify as statistically significant. As Ms. Allen has previously testified, one would expect to observe 5% of the days to be statistically significant by chance alone, but under her method it is only 0.9% - further demonstrating that she is essentially requiring significance at the 99% level, not the standard 95%. [47]

D. THOUGH UNNECESSARY, A MORE APPROPRIATE METHOD TO ADJUST FOR "MULTIPLE COMPARIONS" STILL RESULTS IN

correction seeks to upset the typical balance employed with no evidence to suggest it is necessary to arrive at a reasonable and justifiable statistical conclusion. Based on evaluating the cumulative abnormal return across the corrective disclosure events, I can easily reject (at far greater than the 99% confidence threshold) the null hypothesis underlying Dr. Allen's purported correction (that the true average abnormal return is zero across all these events).

[46] John D. Finnerty, "A Closer Look at Correction for False Discovery Bias When Making Multiple Comparisons," *Journal of Forensic Economics*, Vol. 21, No.1, 2009, pp. 55-62.

[47] Expert Report of Lucy Allen filed November 16, 2007, p. 8.

STATISTICALLY SIGNIFICANT PRICE CHANGES ON THE ALLEGED CORRECTIVE DISCLOSURES

53. Even if such a correction for multiple comparisons were necessary, which it is not, Ms. Allen selects the most aggressive correction technique that maximizes the possibility of Type II error (the probability of falsely saying there was not a statistically significant price reaction).[48] A more powerful test to account for multiple comparisons called Holm-Bonferroni confirms the statistical significance of a number of events she inappropriately treats as statistically insignificant. According to one journal article, “Holm provided a method that applies in the same cases as the Bonferroni procedure but is uniformly more powerful.” The same article concludes, “there does not appear to be any valid reason to continue using the Bonferroni procedure.”[49]

54. Without getting into the technical details, the intuition behind the Holm-Bonferroni method is that the number of “multiple comparisons” you have to adjust for is decreased if certain results are highly statistically significant. For example, in this matter, I am testing six corrective disclosures, but December 7, 2001 is so clearly statistically significant, that it is more appropriate to approach the remaining tests as if I am only testing five corrective disclosures. Then, if there is an event that passes the test for five multiple comparisons, then I can reduce the

[48] According to Hardeo Sahai and Mohammed I. Ageel, 2000, *The Analysis of Variance: Fixed, Random, and Mixed Models*, Birkhauser, p. 79, “The [Bonferroni] procedure should be used where there are only few comparisons to be made and none of the other procedures are appropriate….Holm (1979) introduced a modified Bonferroni test that consists of a class of sequentially rejective Bonferroni (SRB) procedures which results in greater power than the Bonferroni’s test.”

[49] Mike Aickin and Helen Gensler, “Adjusting for Multiple Testing when Reporting Research Results: The Bonferroni vs Holm Methods,” *American Journal of Public Health*, May 1996, Vol. 86, No. 5, pp. 726-728. Note that none of these sources suggests use of either the Bonferroni or Holm-Bonferroni measures in the context of event studies.

"correction" to four events instead of five, and so on until there are no more statistically significant results.[50]

55. **Exhibit 6** presents my application of the Holm-Bonferroni procedure. Under this methodology, which does a far better job of avoiding Type II error, I find that the Holm-Bonferroni correction leads to the same conclusions regarding statistical significance as the event study analysis prior to any "correction." All six of the corrective disclosures are statistically significant over a two-day event window with greater than 95% confidence.

56. By contrast, Ms. Allen claims that the statistical tests need to be adjusted for 35 days uniformly across all the events using the Bonferroni test, even though some, like December 7, are statistically significant after applying the test. In addition to applying a very conservative and inappropriate adjustment in testing for statistical significance, Ms. Allen adjusts for too many events. To be consistent with Plaintiffs' allegations, the only relevant events to test are the relevant alleged corrective disclosures, of which there are 6, not 35. Therefore, even if Ms. Allen were correct in making an adjustment to the statistical test, which she is not, at most, she should correct for the six relevant corrective disclosure events.[51]

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[50] George A Milliken and Dallas E. Johnson, 2009, *Analysis of Messy Data: Designed Experiments*, Second Edition, Volume 1, CRC Press, p. 58 ("The Bonferroni-Holm method starts with the Bonferroni adjustment for the first test, but increases the significance level for tests that follow."). Also see, Stanton A. Glantz, *Primer of Biostatistics*, Seventh Edition, 2012, pp. 62-65 ("The Holm test is nearly as easy to compute as the Bonferroni correction, but yields a more powerful test. The Holm *t* test is a so-called sequentially rejective, or step-down procedure because it applies an accept/reject criterion to a set of ordered null hypotheses, starting with the smallest P value, and proceeding until it fails to reject a null hypothesis.").

[51] Ms. Allen also suggests she looked at a "Sidak correction". The Sidak correction is slightly less aggressive, but very similar to Bonferroni in that it does not take into account how certain highly significant results should reduce how stringent the test is for the remaining events. The two tests (Bonferroni and Sidak) are in general "very close to each other, but the Bonferroni approximation is pessimistic (it always does worse than the Sidak equation.") *See* Hervé Abdi, "Bonferroni test" in *Encyclopedia of Measurement and Statistics*, edited by Neil J. Salkind (Sage, 2007), p. 105. This family of tests is concerned only about Type I error and not Type II error.

57. It is important to keep in mind, however, that performing any of these tests is only appropriate when there is random testing of data and therefore a heightened probability of Type II error.[52] Such a concern is not present here, and the "correction" for multiple comparisons is totally unnecessary.

58. In summary, after addressing the omitted variable bias in her regression and eliminating her improper "correction" technique, there is clear evidence of statistically significant stock price reactions to the alleged corrective disclosures in this matter.

VI. THE ALLEN REPORT'S ATTEMPT TO SHOW A LACK OF PRICE IMPACT ON DECEMBER 7, 2001 BY APPEALING TO THE MARKET REACTION OF OTHER ASBESTOS COMPANIES, "UNCERTAINTY", AND "VOLATILITY" FAIL

59. Even after applying her inappropriate "correction for multiple comparisons," Ms. Allen finds that Halliburton's stock price decline on December 7, 2001 was highly statistically significant.[53] This provides strong economic evidence of price impact. Nevertheless, Ms. Allen attempts to put forth evidence to suggest that this statistically significant abnormal decline in Halliburton's stock price was somehow caused by other, non-culpable factors. For example the Allen Report asserts:

[52] The articles Ms. Allen uses to advocate these types of corrections and the articles I have found on the subject tend to be in the medical/healthcare field, not finance or economics, and are generally talking about situations when a researcher is testing lots of relationships without a preexisting theory and then drawing inferences from that data as to whether there is evidence supporting that theory. "The Bonferroni correction adjusts probability (p) values because of the increased risk of a type I error when making multiple statistical tests. The **routine use of this test has been criticized as deleterious to sound statistical judgment, testing the wrong hypothesis, and reducing the chance of a type I error but at the expense of a type II error**; yet it remains popular in ophthalmic research." The article concludes: "Whether or not to use the Bonferroni correction depends on the circumstances of the study. It should not be used routinely and should be considered if: (1) a single test of the 'universal null hypothesis' (Ho) that all tests are not significant is required, (2) it is imperative to avoid a type I error, and (3) a large number of tests are carried out without preplanned hypotheses." Richard A. Armstrong, When to Use the Bonferroni Correction," *Opthalmic & Physiological Optics*, 2014, Vol. 34, pp. 502-508 (emphasis added). None of these conditions are present here.

[53] Allen Report Exhibit 1a.

> Halliburton's stock decline at the end of the class period was attributed to an increase in uncertainty and the change in the economic and asbestos environment that also affected other companies.[54]
>
> The fact that other companies with asbestos exposure were *similarly affected* demonstrates that Halliburton's price decline at the end of the class period was not due to the revelation of alleged fraud but due to the change in the economic and asbestos environment.[55]
>
> According to analysts and options pricing data, Halliburton's price decline after the December 7, 2001 announcement was due to an increase in uncertainty and irrationality. In addition, Enron's recent bankruptcy reportedly further increased uncertainty, which affected the price of Halliburton's stock at the end of the class period.[56]

60. As will be shown, these statements and conclusions are not supported by any reliable analysis. First, the notion that other asbestos companies responded "similarly" to Halliburton is grossly misleading, belied by the facts, and not econometrically tested by Ms. Allen even though she could have done so. Second, although she cites to analyst commentary regarding the effect of Enron's collapse on Halliburton's stock price specifically and on uncertainty generally, Ms. Allen performs no tests to validate such claims even though she could have. If she had, she would have found there is simply no evidence of either in the actual data. Third, the dramatic increase in Halliburton's implied volatility after December 7, 2001 only further supports, rather than detracts, from the notion that Halliburton's stock price was impacted by new information about Halliburton's exposure to asbestos liabilities.

61. Importantly, despite the statements made above in the Allen Report, Ms. Allen clarified in her deposition that she is not actually opining that these factors can account for all of Halliburton's stock price movement on December 7, 2001:

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[54] Allen Report at X.A.6 (See Allen Report Table of Contents and Allen Report p. 97).

[55] Allen Report at ¶ 229 (emphasis added).

[56] Allen Report at ¶ 230.

> Q. You talk about increase in uncertainty and a change in the changing -- you talk about an increase in uncertainty and change in economic and asbestos environment. Is your opinion that those factors increase in uncertainty and change in the economic and asbestos environment contributed to 100 percent of Halliburton's stock drop on December 7th? Yes or no, and please feel free to explain.
>
> A. I haven't tried to answer that question.[57]
>
> Q. Do you have an opinion about how much of Halliburton's stock price dropped on December 7th was caused by uncertainty and changes in the economic and asbestos environment?
>
> A. I think it's a large portion. I have not done an analysis of what -- I have particularly focused on whether the misrepresentations had a price impact. I have not -- I think a large portion of the stock price decline is due to increasing uncertainty and increasing fears about asbestos in the future. I have not determined the exact amount that is due to one component versus another component and I have tried to discuss and analyze a number of the factors that I think are, I think, including overreaction that I think are accounting for the stock price decline.[58]
>
> Q. Is it your opinion that none of the drop in Halliburton stock price on December 7th was a result of company specific information regarding Halliburton's asbestos liability?
>
> A. No.[59]

62. As this testimony and my review of her evidence will demonstrate, the Allen Report simply does not and cannot establish that factors other than new Halliburton-specific information about its exposure to asbestos liability account for all (or even a large portion) of its stock price decline on December 7, 2001.

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[57] Allen Deposition, p. 186:5-16.

[58] Allen Deposition, pp. 186:25 - 187:20.

[59] Allen Deposition, p. 191:4-9.

A. OTHER ASBESTOS COMPANIES WERE NOT "SIMILARLY AFFECTED" BY HALLIBURTON'S DECEMBER 7, 2001 DISCLOSURE, AND MS. ALLEN'S COMPARISONS ARE GROSSLY MISLEADING

63. The Allen Report asserts that other asbestos companies were "similarly affected" by Halliburton's December 7, 2001 disclosure.[60] Based on this, Ms. Allen concludes "that Halliburton's price decline at the end of the class period was not due to the revelation of alleged fraud but due to the change in the economic and asbestos environment."[61]

64. More specifically, the Allen Report states:

> The stock of other companies with asbestos exposure declined after the December 7, 2001 alleged corrective disclosure on fears of asbestos and uncertainty – evidence that changing conditions, rather than the alleged fraud, *was the cause of Halliburton's stock price decline*.[62]

65. This conclusion is wrong, misleading, and inconsistent with her own data and analysis. The only actual comparison the Allen Report presents to show a decline in price in other asbestos companies is a bar chart that compares Halliburton's raw market capitalization change from a two trading day window (December 7 and December 10) to that of three other asbestos companies. The bar chart shows the *raw market capitalization decline* of CBS/Viacom (-$11.8 billion) and Pfizer (-$12.5 billion) were greater than the raw market cap decline of Halliburton (-$2.9 billion).[63] This comparison proves nothing and is misleading on multiple levels. First, note that all of Ms. Allen's other analyses compare *relative* price movements (*e.g.*, log changes or percentage changes), rather than raw dollar value movements. In fact, all event

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[60] Allen Report at ¶ 229.

[61] Allen Report at ¶ 229 (emphasis added).

[62] Allen Report at X.A.6.b.i., p. 102 (emphasis added).

[63] Allen Report at ¶ 242. The table also shows that Georgia Pacific had a market cap decline of $1.5 billion.

study analyses I have ever seen compare relative price movements and not raw dollar price movements.

66. **Exhibit 7** provides a comparison of Ms. Allen's chart using log changes (consistent with her event study) instead of raw dollar movements. Properly compared as percent changes, these three companies did not experience nearly the same relative decline in value as Halliburton.

67. To understand how profoundly misleading her comparison is, consider **Exhibit 8a** which compares the number of two-day windows during the Class Period where CBS/Viacom and Halliburton had two-day market cap changes greater than $2 billion, $3 billion, and $4 billion respectively.[64] For Halliburton, such large drops in market cap are rare, with only seven two-day windows exceeding $2 billion, and two of those include the alleged corrective disclosure on December 7, 2001. By Contrast, for CBS/Viacom changes of this size are not rare events at all. Compared to Halliburton's seven market cap changes greater than $2 billion, CBS Viacom had 260, and on nearly 30% of the two-day windows over the Class Period, CBS/Viacom had market cap changes larger than the one Halliburton experienced over December 7-10, 2001. CBS/Viacom is so large relative to Halliburton that on the *average* two day period, the absolute change in CBS/Viacom's market capitalization is approximately $2.3 billion, close to Halliburton's $2.9 billion two-day movement on December 7 – 10, 2001.

68. This dramatic difference in average change in market capitalization change occurs because CBS/Viacom is so much larger than Halliburton. For example, just prior to December 7, 2001, CBS/Viacom had a market capitalization of $85 billion while Halliburton's was $9

[64] A single day can be part of two separate two-day windows in this analysis. For instance, December 4, 2001 is used to calculate the two-day change over December 3 and 4, as well as December 4 and 5.

billion.[65] In other words, CBS/Viacom was over 9 times larger than Halliburton and therefore would need to have a market capitalization decline more than 9 times higher than Halliburton's for the firms to lose "similar" value in relative terms. As a result, the fact that CBS/Viacom's market capitalization movement on December 7-10, 2001 is larger than Halliburton's suggests absolutely nothing about whether CBS/Viacom reacted "similarly" to Halliburton.

69. The Allen Report's comparison of Halliburton to Pfizer is even more egregious. On the day prior to December 7, 2001, Pfizer had a market capitalization of over $270 billion, nearly *29 times* as large as Halliburton.[66] **Exhibit 8b** compares the frequency of two-day changes in market capitalization for Halliburton and Pfizer that exceed $2 billion, $3 billion, and $4 billion. The two-day windows including December 7, 2001 are the only time Halliburton's market capitalization changed by over $4 billion, whereas Pfizer experienced 300 market cap changes that size or larger during the Class Period. In other words, the $4 billion market cap change over December 7-10, 2001 which was a dramatic change for Halliburton, occurred on 60% of the two-day windows over the Class Period for Pfizer. That Halliburton's maximum two-day market cap change is less than the *average* two-day change for Pfizer exemplifies the meaninglessness of Ms. Allen's comparison.

70. Finally on this point, consider that Halliburton's stock price simply could not have fallen the same $11.8 billion (CBS/Viacom) or $12.5 billion (Pfizer) *because its entire market capitalization was only $9 billion*.[67] Thus, even if Halliburton's price had fallen to zero, Ms. Allen's logic would still imply these other companies reacted "similarly" or even greater than

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[65] Allen Report Backup Material - "Market Cap.xlsx".

[66] Allen Report Backup Material - "Market Cap.xlsx".

[67] Allen Report Backup Material - "Market Cap.xlsx".

Halliburton. Ms. Allen's attempt to try to draw any relevant economic conclusion by comparing these raw dollar figures is pointless and absurd.

71. Compounding the misleading nature of this analysis further, Ms. Allen has cherry-picked the firms she compares against Halliburton and provides no explanation of why she focuses on CBS/Viacom, Pfizer, and Georgia Pacific rather than her asbestos index as a whole.[68] For example, consider **Exhibit 9a** which simply expands upon Ms. Allen's chart of CBS/Viacom, Pfizer, and Georgia Pacific to include the other companies in her asbestos index. Based on Ms. Allen's logic, one would conclude that the vast majority of asbestos companies did not have a similar reaction to the news on December 7, 2001. Of course, as I described above, this analysis uses the wrong measure, but the exhibit shows that even using this improper measure, Ms. Allen has ignored most of the relevant data.

72. **Exhibit 9b** analyzes the same data but charts the log changes in market cap (*i.e.*, the same metric the Allen Report uses throughout the remainder of the analysis). Put on this proper scale, it is clear that the other asbestos companies did not react remotely "similarly" to Halliburton. Although on average they fell 5.1%, Halliburton fell 32.9%, more than 6 times the average.

73. Furthermore, in contrast to Ms. Allen's argument that only looking at one-day price responses to news is appropriate,[69] in this analysis she has subtly shifted to charting the two-day price response which benefits her argument since taking into account the rebound in Halliburton's stock price on December 10 reduces Halliburton's losses. Using the single day of December 7, **Exhibit 10** shows how the log change in Halliburton's stock price stands out even

[68] In fact, at deposition she acknowledged that she picked them because they were the largest, not because they were representative (Allen Deposition, p. 207:8-17).

[69] Allen Report at ¶ 86.

more. Halliburton fell 42.4 percent on this day, more than *12 times* the average decline of 3.5 percent for firms in her asbestos index.[70]

74. In sum, the data simply do not support that other asbestos companies experienced "similar", let alone "more" of a response to Halliburton's announcement on December 7, 2001. Thus, the evidence does not support Ms. Allen's incredible and unfounded assertion that "[t]he fact that these other companies' stocks *declined more* in value than Halliburton's stock *is direct evidence* that the alleged misrepresentations regarding Halliburton's asbestos liability was not the cause of Halliburton's stock price decline at the end of the class period."[71]

B. MS. ALLEN COULD HAVE USED HER ASBESTOS INDEX TO DISAGGREGATE THE IMPACT ON HALLIBURTON'S STOCK PRICE

75. Ms. Allen's focus on comparing raw dollar changes in market capitalization for only three other companies in her asbestos index is perplexing considering she runs a regression that allows her to explicitly disaggregate the effects of the asbestos index on Halliburton's stock price.[72] Ms. Allen describes how she performed a detailed statistical analysis and "Chow Test" which shows that during the Class Period, her asbestos index did not have any predictive power in explaining Halliburton's stock price returns, whereas starting on December 7, 2001, it did exhibit predictive power. I will describe in a subsequent section how this is actually strong

[70] I also note that the Allen Report never addresses differences in the timing of Halliburton's price decline and Pfizer's price decline over this two day window. Halliburton's stock price fell on December 7 and partially recovered on December 10, while Pfizer's stock price hardly moved on December 7 (*see* Exhibit 10), but declined on December 10 (*see* Exhibit 9a). By looking at the two-day return Ms. Allen masks this important difference, which calls into question whether Pfizer's stock was truly responding to the same information as Halliburton's stock. This timing difference is also found with regard to Pfizer's increase in implied volatility – Note that on her chart in ¶ 245, Pfizer's implied volatility increases *after* December 7, 2001, not concurrent with December 7 like Halliburton's implied volatility.

[71] Allen Report at ¶ 243 (emphasis added).

[72] Allen Report at ¶ 20, ¶¶ 268-270.

evidence in favor of rather than contrary to a finding of price impact;[73] however, the relevant point here is that *she already has a predictive model for how movements in the asbestos index explain movements in Halliburton's stock price and it shows that 96% of the stock price movement on December 7 (and 90% of the stock price movement on December 7 – December 10) is attributable to something other than the changes in the asbestos environment.*

76. **Exhibit 11** presents the calculations underlying this analysis and shows that the same general conclusion holds whether one looks at Ms. Allen's flawed regression without the Industry Peer Index, or whether the Industry Peer Index is added. Based on the regression results in the Allen Report Exhibit 2b, starting on December 7, 2001 and for the year after the Class Period, the asbestos index had a coefficient of 0.92 for one-day returns. This is shown in line 4 of Exhibit 11. This implies that once the market better understood Halliburton was an "asbestos company", for every 1% change in the "asbestos index" you could expect to observe a 0.92% change in Halliburton's stock price. Line 3 of Exhibit 11 shows that the asbestos index declined by 2.3% on December 7, 2001. Multiplying these factors together shows that the movement in the asbestos index would cause Halliburton's stock price to decline by 2.1% as a result of the "change" in the "asbestos environment" on that day (line 5 of Exhibit 11).[74]

77. However, on December 7, Halliburton did not drop a mere 2.1% as the asbestos index predicts; In fact, line 2 of Exhibit 11shows that it dropped approximately 57% after controlling for her other industry indices on December 7, 2001.[75] This means that only

[73] *See* Section VII.

[74] Recall that for ease of exposition I talk in terms of percent changes although technically the regression is in logs.

[75] The qualitative nature of these results are no different if one were to use the corrected version of her regression that includes the Industry Peer Index.

approximately 4% of the total change in Halliburton's abnormal return on that day (2.1% divided by 57%) is explained by the asbestos index, and the remaining 96% of the total change observed on December 7 cannot be explained by movements in other asbestos companies.[76] In other words, 96% of the stock price movement on December 7 is attributable to something other than changes in the general asbestos environment, such as the Halliburton-specific news released that day. Thus, the obvious statistical analysis Ms. Allen could have but did not do, based on her own event study analysis, implies that very little of Halliburton's stock price movement on December 7, 2001 can be explained by broader changes in other asbestos companies.[77] Allen claims:

> The stock of other companies with asbestos exposure declined after the December 7, 2001 alleged corrective disclosure on fears of asbestos and uncertainty – evidence that changing conditions, rather than the alleged fraud, *was the cause of Halliburton's stock price decline*.[78]

This claim is totally unsupported by her own analysis.

78. In sum, Ms. Allen ignores her own regression models when analyzing the extent to which changes in the asbestos index could explain Halliburton's stock price decline on December 7, 2001. Had she done so instead of performing meaningless raw dollar comparisons,

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[76] For the two-day return, over 89% of Halliburton's abnormal decline is not explained by the asbestos index.

[77] When asked at deposition why she did not conduct this analysis, Ms. Allen tried to suggest it was not methodologically sound to predict at a point when the relationship was changing (Allen Deposition, pp. 217:18 – 218:6). However, at best her argument would suggest the relationship between Halliburton and her asbestos index changed from zero to 0.92. In order for the asbestos index to fully explain Halliburton's stock price movement it would need to have a coefficient (or beta) of 25. In all my years of performing event studies, I have never seen a beta on an industry index ever reach anywhere close to this level, and Ms. Allen certainly presents no analysis to suggest it could be that high. Therefore, her objection dos not excuse failing to acknowledge that her asbestos index cannot possibly explain Halliburton's price movement.

[78] Allen Report at X.A.6.b.i., p. 102 (emphasis added).

she would have seen that the "confounding" factor she describes cannot explain a large portion of the market price decline on December 7, 2001.

C. MS. ALLEN'S ATTRIBUTION OF HALLIBURTON'S STOCK PRICE DECLINE TO "UNCERTAINTY" DOES NOT REFUTE PRICE IMPACT

79. Increased firm-specific uncertainty (i.e. implied volatility) caused by a corrective disclosure is not a confounding factor. The essence of Plaintiffs' claim is that Halliburton had downplayed the actual potential liability (and thus uncertainty) it faced from exposure to asbestos suits. On December 7, 2001, when Halliburton announced the third adverse litigation outcome in less than two months, the market reacted significantly and it is not at all surprising that implied volatility increased as well. Indeed, recent past volatility is a primary input into how the market assesses future potential volatility. So Ms. Allen is essentially taking the very uncertainty created by the corrective information and the price impact it generated and attempting to characterize it as a confounding factor.

80. I note that Ms. Allen provides no academic, legal, or other authoritative support to buttress her position that an increase in uncertainty (in the form of increased implied volatility) is appropriate to consider as a confounding factor, and that is because it makes no economic sense. Indeed, the fact that a series of three adverse outcomes in asbestos cases announced over a period of less than two months caused the market to assume much greater variability in potential outcomes is the essence of the corrective information, not a factor that confounds whether the price impact occurred or is corrective. In fact, when she quotes analysts talking about increased "uncertainty", they specifically say it is "due to the uncertainty surrounding [Halliburton's] asbestos liabilities".[79] This is supportive, not contrary, to Plaintiffs' view that the December 7,

[79] Allen Report at ¶ 233.

2001 price decline was due to what had been allegedly concealed from the market – that Halliburton faced great uncertainty about its asbestos liabilities.

D. MS. ALLEN'S ANALYSIS OF AN INCREASE IN OTHER ASBESTOS FIRMS' IMPLIED VOLATILITY IS FLAWED AND IRRELEVANT

81. Ms. Allen also suggests that lack of price impact is also indicated by the increase in implied volatility of other asbestos companies. She states:

> Further evidence that Halliburton's stock price decline at the end of the class period was caused by increasing uncertainty regarding asbestos (rather than the alleged fraud) is that the *implied volatility of the stock of other companies with asbestos exposure increased dramatically following the December 7, 2001 alleged corrective disclosure*. The increased implied volatility of other companies cannot be due to Halliburton's alleged fraud and thus, is further evidence of increased uncertainty in the market. Moreover, because Halliburton's price decline is due to this increased uncertainty, Halliburton's price decline is not evidence of price impact.[80]

82. These arguments fail to address price impact. First, even if she is right that Halliburton's disclosure of a series of adverse litigation outcomes over less than two months did cause some degree of increase in implied volatility in other asbestos companies (although this itself is grossly overstated by Ms. Allen) it does not imply a lack of price impact. A disclosure that causes one stock price to decline can cause investors in other companies to consider what that information might also imply for those companies. There is no economic or legal principle I am aware of that requires corrective information to be so insulated to a specific company that it does not increase uncertainty in other companies.

83. Second, even if one wanted to consider the increase in implied volatility in other companies to be a confounding factor (which would thus impact their stock prices), I have already addressed this point in Section VI.B. above where I demonstrated that the price change

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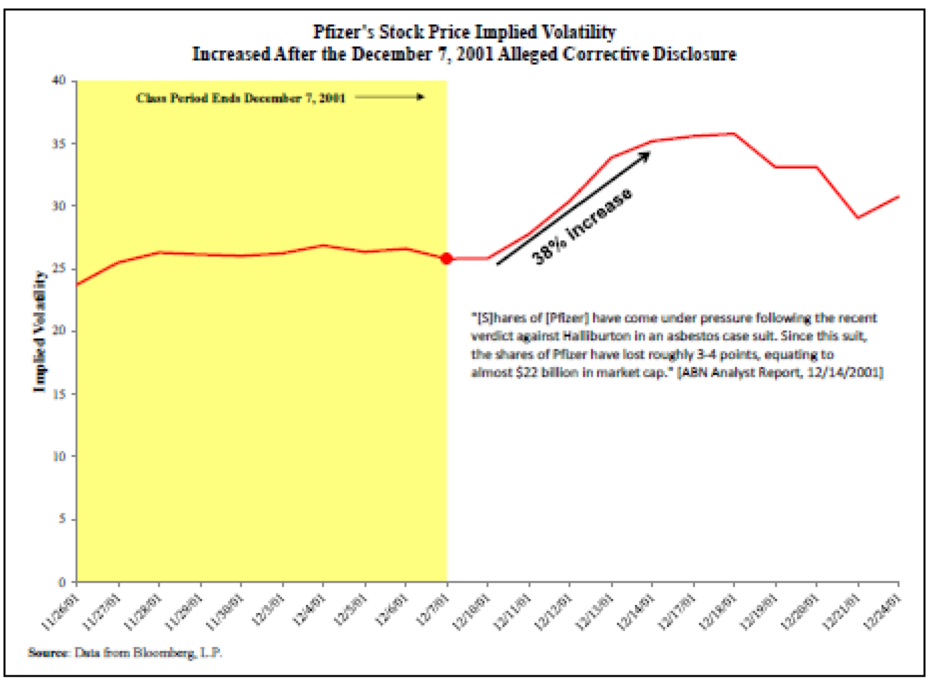
[80] Allen Report at ¶ 244 (emphasis added).

in the asbestos index cannot explain more than a small fraction of Halliburton's stock price decline.

84. Third, Ms. Allen provides a misleading analysis of the degree to which the implied volatility of other asbestos companies increased as of the December 7, 2001 announcement. The only actual data she relies upon consists of charts showing an increase in implied volatility after the class period for three cherry-picked companies. Even for these cherry-picked companies, the increase in implied volatility is far less than the implied volatility increase for Halliburton (See **Exhibit 12**).

85. Fourth, for Pfizer, her chart (reproduced below) actually shows there was no increase in implied volatility on December 7 and only subsequently (and over a longer time period) was there an increase in implied volatility.



86. Fifth, Ms. Allen again fails to perform the analysis she could have with the data she already has. If she had looked at her asbestos index as a whole, it would have been clear that not all the asbestos companies experienced a "dramatic increase" in implied volatility (See **Exhibit**

13). In fact, Exhibit 13 shows that when looking at an index of the implied volatility for the companies in her asbestos index as a whole (rather than a cherry-picked few), there is a slight uptick in implied volatility as of December 7, 2001, but it is certainly a smaller rise (more than 38 times smaller) than what Halliburton experienced. To somehow suggest that implied volatility of the other asbestos companies provides a reason for why Halliburton's stock price fell is not borne out by the data. As a result, her statement that "the implied volatility of the stock of other companies with asbestos exposure increased dramatically following the December 7, 2001 alleged corrective disclosure"[81] is not borne out by her own data.

E. MS. ALLEN'S APPEAL TO MARKET-WIDE UNCERTAINTY AND THE EFFECT OF ENRON'S BANKRUPTCY IS INCONSISTENT WITH THE ACTUAL DATA, WHICH SHE IGNORES

87. Ms. Allen points to the collapse of Enron as somehow influencing Halliburton's December 7, 2001 stock price decline:

> In addition, Enron's recent bankruptcy reportedly further increased uncertainty, which affected the price of Halliburton's stock at the end of the class period.[82]
>
> The bankruptcy of Enron in December 2001 also contributed to the increasing uncertainty in the market at the end of the class period. Analysts believed that the drop in Halliburton's stock price at the end of the class period was in part caused by the increasing uncertainty in the market created by the Enron bankruptcy.[83]

88. In support of this contention, she cites to two press reports and a single analyst report following the December 7, 2001 events.[84] As a financial economist, Ms. Allen is fully capable of analyzing the extent to which the bankruptcy of Enron impacted the stock price of

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[81] Allen Report at ¶ 244.

[82] Allen Report at ¶ 230

[83] Allen Report at ¶ 237

[84] She also cites to an analyst report issued over a month and a half later (January 28, 2002) that is not discussing the December 7, 2001 event specifically, but is talking about why Halliburton's stock price "could lag behind" in the future. Therefore it is not even relevant to the question at hand.

Halliburton and contributed to market-wide volatility. She does not do this, and instead appeals to these few passages as evidence. In fact, however, there is no actual data to support the notion that Enron exerted any influence on Halliburton's stock price decline on December 7, 2001.

89. First, her own event study shows that Halliburton's stock price did not react significantly to the Enron bankruptcy.[85] Second, her own charts of the implied volatility around the time of the Enron bankruptcy (December 2, 2001) show no increase in implied volatility for Halliburton or any of the asbestos companies she analyzes (See Exhibit 12**)**. Finally, as shown on **Exhibit 14**, the VIX, a market-traded index that directly measures the market's assessment of expected volatility, shows a very minor uptick at the time of the Enron bankruptcy, but quickly returned to a general *downward* trend in expected volatility. Furthermore, there is simply no statistical analysis, let alone evidence, in the Allen Report that ties this December 2 event to the Halliburton-specific price decline on December 7, 2001.

90. Reliance on rationalizing by popular press reports and a single analyst for otherwise testable hypotheses is not a recognized approach for a financial economist when attempting to explain stock price movements. There is simply no objective reliable evidence for blaming the December 7, 2001 price response on market-wide or Enron-related "uncertainty" or "irrationality."

[85] This is true with or without inclusion of the Industry Peer index. Her Energy Index had a positive return on the first trading day following Enron's bankruptcy announcement and Halliburton had a positive raw return and abnormal return in both regression models.

F. MS. ALLEN'S ASSERTION THAT ASBESTOS COMPANIES DID NOT RESPOND SIGNIFICANTLY TO ASBESTOS NEWS DURING THE CLASS PERIOD IS NOT TRUE – IT IS JUST AN ARTIFACT OF HER SELECTION PROCEDURE

91. In a lengthy section from ¶246 to ¶264 of her report, Ms. Allen purports to demonstrate that certain companies with exposure to asbestos liabilities (Honeywell, Dow Chemical, and 3M) had statistically significant stock price reactions to asbestos-related news after the Class Period, but not during the Class Period. The primary conclusion she is asking the Court to draw from this analysis is that if these three companies' stock prices did not react to asbestos-related news during the Class Period, then there is no evidence a corrective disclosure would have impacted Halliburton's stock price earlier in the Class Period:

> Companies other than Halliburton with asbestos exposure had no statistically significant price reactions attributable to asbestos news during the class period but had significant price reactions after the end of the class period. This demonstrates that the market viewed asbestos news for companies with asbestos exposure differently after the class period than it did at the time of the alleged misrepresentations. **Thus, any price reaction to asbestos news at the end of the class period is not evidence of how the market reacted to related information earlier in the class period. Therefore, even if the verdict news announced at the end of the class period were corrective (which my analysis shows it was not), the price decline after this announcement is not evidence that the purportedly related alleged misrepresentations had any price impact on the stock price**.[86]

92. In other words, Ms. Allen is asking the Court to conclude that because these three particular companies (3M, Honeywell, and Dow Chemical) did not have significant stock price reactions to asbestos-related news during the Class Period, that correction of Halliburton's material misrepresentations and omissions was incapable of having impacted Halliburton's stock price during the Class Period. This is preposterous on a number of levels.

[86] Allen Report at ¶ 246 (emphasis added).

93. First, for Dow Chemical and 3M, the Allen Report states that there were no news stories or analyst reports mentioning their asbestos liability during the Class Period.[87] Therefore, for those two particular companies, there is simply no statistical evidence whatsoever of how a disclosure of materially higher asbestos liabilities would have impacted the market price during the Class Period. A lack of statistically significant price responses to a lack of news is utterly meaningless to the question she purports to address.

94. Second, Ms. Allen ignores that her own event study found a statistically significant negative price reaction to Halliburton's disclosure that it faced greater asbestos liabilities on June 28, 2001 when Harbison-Walker requested financial assistance.[88] Therefore, whether that information is corrective or not, there is direct Halliburton-specific statistical evidence that the market price was sensitive to information about asbestos liabilities prior to December 7, 2001. I also showed in a previous section that, after correcting her event study, there were several other dates before December 7, 2001 where Halliburton's stock price reacted significantly to announcements of adverse asbestos litigation outcomes.[89]

95. Third, Ms. Allen ignores the consistent analyst coverage and interest in Halliburton's asbestos liabilities during the Class Period. For example:

> HAL has lagged the other large caps significantly so far this year, declining 0.6 versus a 44% gain for [Baker Hughes] and a 41% gain for [Schlumberger],

[87] Allen Report at ¶ 256 and ¶ 261.

[88] Ms. Allen argues that this finding is eliminated by the need to correct for "multiple comparisons", but as I argued earlier, such a correction is unnecessary, and even if it were, a more reasonable correction confirms that the negative return on June 29, 2008 in response to the post-market June 28, 2001 alleged corrective disclosure is statistically significant.

[89] Exhibit 4a showed that the one and two-day returns for the following days were statistically significant at the 95% confidence level: August 9, 2001 in response to Halliburton's 2Q01 10-Q release; October 31, 2001 in response to post-market news on October 30, 2001 regarding the Mississippi verdict; and December 4, 2001 in response to the Texas judgments.

> primarily as a result of concerns about the company's weak earnings recovery and secondly on concerns about potential asbestos liability.[90]
>
> Investor concerns of asbestos liabilities may dampen investor's interest in the stock until the ultimate outcome becomes more clear.[91]
>
> We also believe that the upward creep in the accrued liability per open asbestos claim and the dispute that HAL has yet to resolve with Highlands, its former insurance subsidiary, may be overhanging the stock.[92]
>
> We attribute the stock price weakness to Halliburton's disappointing E&C execution, late cycle exposure and concern about asbestos litigation.[93]
>
> Halliburton's stock has been hurt by the lagging engineering & construction operations and the overhanging asbestos litigation.[94]
>
> Given the significant discount relative to its peer group, we believe that HAL's current stock price adequately discounts potential asbestos risk.[95]

96. In light of this focus on asbestos by securities analysts, the claim that Halliburton's stock price was not sensitive to asbestos-related information is untenable.

97. Fourth, Ms. Allen's analysis demonstrates that after the Class Period, Honeywell and Dow exhibited significant negative stock price reactions upon adverse news related to asbestos liabilities. Rather than supporting a lack of price impact, these examples provide further affirmative proof that stock prices can and do often react negatively to adverse asbestos-related developments. This is highly supportive of Plaintiffs' price impact position, not contrary to it.

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[90] "Lowering Q1 Est. For Weak Oilfield Recovery; Significant Recent Underperformance Creates and Attractive Entry Point," *Donaldson, Lufkin & Jenrette*, April 5, 2000, p. 2. Note this analyst directly compares Halliburton to Schlumberger and Baker Hughes, the prominent companies in the Industry Peer Index.

[91] "Halliburton Reports, Announces Major Restructuring Initiative," *Dain Rauscher Wessels*, October 25, 2000.

[92] "ML Energy Conference," *Merrill Lynch*, November 22, 2000, p. 2.

[93] "E&C Business Restructuring Formally Announced – 4Q2000 EPS On Track," *A.G. Edwards*, December 21, 2000, p. 4.

[94] "Halliburton Company," *Lehman Brothers*, May 15, 2001, p. 1.

[95] "3Q2001 EPS in Line and Asbestos Claims Slow – Weaker Macro Outlook, But Valuation Attractive," *A.G. Edwards*, October 23, 2001, p. 1.

98. Fifth, and stunningly, she ignores that well beyond having statistically significant price reactions, a number of firms went bankrupt before and during the Class Period as a result of their exposure to asbestos-related liabilities. Indeed, Ms. Allen is aware of this and stated that in choosing companies for her asbestos index she explicitly "excluded companies that went bankrupt during the class period."[96] **Exhibit 15** shows the stock price history for four public firms that went bankrupt as a result of their asbestos liabilities during the Class Period. During the Class Period, according to Crowell Moring, 16 companies had started bankruptcy proceedings as a result of exposure to asbestos liabilities.[97] At least another 31 companies had declared bankruptcy even before the Class Period.[98] **Exhibit 16** shows that the number of firms filing for bankruptcy had been increasing over the Class Period.

99. Ultimately, the only actual economic evidence offered by Ms. Allen that is even remotely consistent with her claim is that one company (Honeywell) did not exhibit a significant stock price reaction to two of the three asbestos-related events she identifies (a January 19, 2001 verdict and the December 4, 2001 Texas judgment).[99] From this sample size of two events for one company, she attempts to make the giant intellectual leap that this somehow scientifically

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[96] Allen Report at n. 21.

[97] Mark D. Plevin, Paul W. Kalish and Kelly R. Cusick, "Mealey's Asbestos Bankruptcy Report, Where Are They Now, Part Four: A Continuing History of the Companies That Have Sought Bankruptcy Protection Due to Asbestos Claims," *Crowell & Moring LLP*, February 2007.

[98] American Academy of Actuaries' Mass Torts Subcommittee, *Overview of Asbestos Claims Issues and Trends*, August 2007; Mark D. Plevin, Paul W. Kalish and Kelly R. Cusick, "Mealey's Asbestos Bankruptcy Report, Where Are They Now, Part Four: A Continuing History of the Companies That Have Sought Bankruptcy Protection Due to Asbestos Claims," *Crowell & Moring LLP*, February 2007.

[99] Allen Report at ¶ 253. For the third event there actually was a significant reaction, but based solely on analyst commentary she dismisses this as caused by other negative news released at the same time. The claim that the verdict contributed nothing to Honeywell's negative significant stock price movement on that day is speculative.

demonstrates that the price of Halliburton would not have reacted to corrective information during the Class Period. This is absurd, unscientific, and unreliable.

100. Ms. Allen's implication that the Class Period was a unique time where the market essentially did not care about asbestos liabilities and that Halliburton's stock price would not have reacted to a disclosure that made clear Halliburton faced materially greater exposure to asbestos liabilities than previously disclosed is inconsistent with economic theory, ignores evidence from the impact of asbestos liabilities on other companies before and during the Class Period, is at odds with the focus of securities analysts covering Halliburton, and belied by the statistical evidence in her own report. The fact that she can point to less than a handful of verdicts for a single company for which there was not a significant market reaction does not logically imply Halliburton's stock price was immune to shocks from adverse asbestos liability disclosures during the Class Period. Even if her more general argument that the market was somewhat *more* responsive and attuned to asbestos-related news after the Class Period is accurate, that simply does not imply a *lack* of price impact during the Class Period.

VII. THE ALLEGED ASBESTOS-RELATED CORRECTIVE DISCLOSURES PROVIDE EVIDENCE OF PRICE IMPACT

101. To properly evaluate whether the alleged asbestos-related corrective disclosures provide evidence of price impact, I start from the presumption that Plaintiffs' asbestos-related claims are true. In other words, I assume that Defendants made material misrepresentations or omissions regarding Halliburton's exposure to asbestos liabilities. The implication is that Defendants' misrepresentations and omissions caused the market to underestimate Halliburton's exposure to asbestos-related liabilities and therefore artificially inflated the market price of Halliburton common stock relative to where it otherwise would have traded.

102. As described earlier, when issued, the alleged misrepresentations and omissions during the Class Period did not “surprise” the market because Halliburton had always represented its belief that its asbestos-related liabilities would not materially affect the Company. As a result, Plaintiffs’ allegations do not imply that the misrepresentations or omissions themselves would yield evidence of price impact. Instead, the relevant evidence for price impact comes from asking: (1) when did the market learn the relevant truth; and (2) is there evidence that the market price reacted to that information?

103. The relevant truth obscured by the misrepresentations and omissions in this case is that Halliburton faced greater exposure to asbestos-related liability than its public statements asserted. This concealed information could come to light in a number of ways foreseeable to Defendants. For example, if Defendants affirmatively sought to continue obscuring the truth, then a foreseeable way the market could come to learn the relevant truth is through adverse litigation outcomes. These adverse litigation outcomes could theoretically come in numerous forms, including, but not necessarily limited to, adverse verdicts, entry of judgments, punitive damages awards, higher than expected settlements, or failed appeals.

104. There is no dispute in this case that over a relatively short period of time in late 2001, Halliburton experienced a number of adverse litigation outcomes.[100] Simply by virtue of having asbestos suits pending against the Company, Halliburton had acknowledged that it could conceivably face adverse litigation outcomes. Thus, it is not necessarily the case that any negative litigation outcome would imply that the market had begun to understand and reflect the relevant truth. In fact, any such negative outcome could reflect a loss in wealth for the Company

[100] Allen Report at ¶ 236.

which could be reflected in the stock price but not necessarily be evidence that the truth of the Company's liability had been revealed to the market.

105. A key to distinguishing between corrective and non-corrective price reactions is to focus on the magnitude of the market price response to the new information. If the market price reaction is consistent with the market interpreting the information as negative but also consistent with Defendants' previous statements, then the price reaction is not affirmative evidence of price impact. For example, if there was a finding against Halliburton and the expected present value of the actual cash outlay Halliburton would have to make was $10 million, then a market capitalization decline of roughly $10 million or less would be entirely consistent with the market interpreting that negative outcome as a one-time independent event that was harmful to the Company.

106. If, however, an event study establishes that the market response to a negative adverse outcome is far in excess of the actual economic impact of that particular outcome, then it provides economic evidence that the market is pricing in something else, namely that the negative outcome forewarns of further negative outcomes.[101]

107. The event study analysis shows that the market price response to the negative litigation outcomes (after controlling for industry price movements) is many orders of magnitude larger than the raw economic implication of the adverse outcome itself, indicating corrective learning by the market must be taking place. **Exhibit 17** compares the market capitalization decline on each of the asbestos-related disclosures to the magnitude of the potential financial

[101] This method of market "learning" is well known in economics and statistics and is formally known as "Bayesian updating".

impact of the event itself.[102] The fact that the market price reactions are orders of magnitude larger than the financial impact of each event provides evidence that the market is pricing in far more than just the outcome itself, thus indicating that the event was interpreted by the market as foreshadowing far greater asbestos liabilities than prior to the corrective events. In other words, the adverse litigation outcomes provided corrective information by directly raising expectations about the expected cost to settle/litigate pending claims and rationally increased expectations about the number of future claims, which Plaintiffs allege had been concealed by the misstatement and omissions.

108. Additional economic evidence of such corrective learning is highlighted by the "Chow test" in the Allen Report. Ms. Allen's Chow test demonstrates that during the Class Period before the series of adverse negative litigation outcomes, Halliburton's stock price was not significantly correlated with her index of other asbestos companies.[103] In other words, the market behaved in a manner consistent with Defendants' alleged misstatements and omissions which communicated that Halliburton's exposure to asbestos-related liabilities would not have a material impact on the Company. Ms. Allen statistically demonstrates through the Chow test that after the series of adverse negative litigation outcomes, Halliburton's stock price became significantly correlated with the asbestos index.[104] In other words, after the adverse litigation outcomes, the market treated Halliburton as an "asbestos" company. This market behavior is affirmative proof that the market reacted inconsistently with Defendants' alleged

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[102] By focusing on the full value of Halliburton's portion of the verdict/liability without considering the potential contribution of insurance, the potential for the success of an appeal, or the time value of money, I am clearly over-stating the independent financial impact of each specific event and understating the difference between the market reaction and the true financial impact of each event.

[103] Allen Report at ¶ 269.

[104] Allen Report at ¶ 269.

misrepresentations and omissions of "no material impact". In other words, there is strong affirmative statistical evidence of corrective learning as a result of the alleged corrective disclosures.

109. Ms. Allen's interpretation of her Chow test is that the market response could theoretically reflect some other exogenous change in how the market priced asbestos liability generally, and that the greater than expected market reaction to the news is not a reflection of the market's beliefs about Halliburton-specific asbestos liabilities, but rather a reflection of these market-wide issues.[105] However, as discussed at length in the prior section, such an effect cannot explain more than a small fraction of the observed price reaction and Ms. Allen's statistical analysis on that score was misleading and incapable of establishing a lack of price impact.

110. In sum, there was partially corrective information released on each of the alleged asbestos-related corrective disclosure events and statistically significant stock price reactions to the release of new information. The magnitude of the market price reaction relative to the economic size of the event itself, along with Ms. Allen's Chow test are strong evidence of corrective learning by the market. Therefore, there is strong economic evidence of price impact as a result of the alleged asbestos misrepresentations and omissions.[106]

VIII. THE ALLEN REPORT'S CONTENTION THAT THE ALLEGED CORRECTIVE DISCLOSURES WERE NOT "CORRECTIVE" IS NOT BASED ON ANY SOUND ECONOMIC ANALYSIS OR DATA

111. Ms. Allen's other approach to find a lack of price impact despite the indisputably significant market price reaction to newly released information on December 7, 2001 (and other

[105] Allen Report at ¶ 271.

[106] While this section has focused primarily on the adverse litigation outcomes, I address Ms. Allen's further specific assertions about whether the Harbison-Walker request for financial assistance or the additional detail in the 2Q01 10-Q were corrective in Sections IX and X respectively.

alleged corrective disclosure days) is to characterize the new information released as not corrective of the alleged fraud. Ms. Allen provides no sound economic analysis or reliable evidence to support the lack of corrective learning in the market.

A. MS. ALLEN DOES NOT OPINE THAT ADVERSE ASBESTOS LITIGATION OUTCOMES ARE INCAPABLE OF CORRECTING FRAUDULENTLY CONCEALED EXPOSURE TO ASBESTOS LIABILITIES

112. In her report, Ms. Allen does not opine or explain why, as a matter of economics, a series of adverse asbestos litigation outcomes are incapable of serving as corrective information when Plaintiffs' allegation is that the Company was fraudulently concealing its exposure to potential asbestos liabilities. Instead Ms. Allen (at ¶178 through ¶228 of her report) offers broad generalizations (which are not capable of being economically or statistically tested) as support for her opinion that the specific verdict announcements in this matter are not corrective. Nowhere in that section does Ms. Allen generally contend that adverse verdicts or other adverse legal outcomes are incapable of providing corrective information to the market in the presence of fraudulently understated asbestos liabilities.

113. Given the starting assumption of the price impact analysis – *i.e.*, that Defendants engaged in a scienter-based fraud to withhold information about asbestos liabilities – and the further assumption that Defendants intended to perpetrate this fraud as long as possible, then the question is how the relevant truth would foreseeably reach the market. The relevant economic truth could reach the market through adverse litigation outcomes that could include large verdicts, settlements, or other indicia of the actual liabilities the Company would face. So, critically, there is no economic or theoretical barrier to one or a series of adverse litigation outcomes serving as corrective information, and Ms. Allen makes no such general economic or logical argument.

114. Instead, Ms. Allen presents a number of arguments as to why, *in this particular case*, it would not be appropriate to treat the verdict and other adverse litigation outcome announcements as corrective. The remainder of this section focuses on why her purported evidence and arguments are incapable of ruling out price impact.

B. HALLIBURTON'S PRIOR RISK DISCLOSURE THAT IT COULD SUFFER A NEGATIVE LITIGATION OUTCOME DOES NOT PRECLUDE CORRECTION OF THE FRAUD

115. Ms. Allen's first argument for why the negative litigation outcomes are not corrective is that Halliburton had previously warned the market that it could potentially suffer a negative litigation outcome.[107] While it is true that Halliburton provided such a risk disclosure, from an economic point of view, such a disclosure does not prevent the fraud itself or the correction of a fraud. As described in the previous section, had the market's reaction to a $10 million verdict been a market price reduction of roughly $10 million, then such a risk disclosure is fairly describing the investment loss that one would expect to observe upon the disclosure of an adverse litigation outcome. However, if there were misstatements or omissions that concealed material exposure to asbestos liabilities followed by events which cause the market to re-price Halliburton's stock consistent with revelation of the fraud, the prior issuance of such a risk disclosure is simply irrelevant to the economic analysis of price impact.[108]

[107] Allen Report at ¶ 152.

[108] To the extent Ms. Allen is making a legal argument that the risk disclosure somehow immunizes Defendants from liability, it is not relevant or appropriate to an economic analysis of price impact.

C. THE MARKET'S ASSERTED "KNOWLEDGE" OF HALLIBURTON'S "VIGOROUS" LITIGATION STRATEGY IS IRRELVANT TO PRICE IMPACT

116. Ms. Allen further argues that the verdict announcements are not corrective because the market understood Halliburton had a "vigorous" defense strategy that resulted in a greater chance of going to trial and thus adverse verdicts.[109] I understand counsel for Lead Plaintiff disputes Ms. Allen's contention that the market was fully informed about Halliburton's litigation strategy and the extent to which it raised the likelihood of adverse outcomes. Indeed, I note Ms. Allen's only evidence of what the market understood during the Class Period is a reference to two selective quotes from analyst reports that don't provide much detail about the nature of Halliburton's litigation strategy or its risks.[110] Other quotations she offers simply don't characterize the nature of Halliburton's strategy[111] or come from after the Class Period.[112]

117. Nevertheless, even if the market understood that Halliburton had undertaken an "aggressive" or "vigorous" strategy, that does not prevent either the fraud itself (which is assumed) or the market responding to a correction of that fraud. If Halliburton understood that its aggressive litigation strategy implied it would ultimately face material liabilities, it is still inconsistent with their public statements about a lack of material impact. Furthermore, even if the market understood Halliburton had undertaken an "aggressive" or "vigorous" litigation strategy, that does not rule out a series of adverse litigation outcomes ultimately revealing Halliburton had downplayed its exposure to asbestos liability. Ms. Allen's argument is simply irrelevant to a price impact analysis.

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[109] Allen Report at ¶ 187.

[110] Allen Report at ¶ 188.

[111] Allen Report at ¶ 189.

[112] Allen Report at ¶¶ 190-191.

118. Furthermore, by focusing on the event study method, the evidence presented in the prior section implicitly takes into account what the market already knew and only analyzes the impact of unexpected news.[113]

D. MS. ALLEN'S CLAIM THAT THE MARKET RESPONSE TO THE TEXAS VERDICT PRECLUDES PRICE IMPACT IS INCORRECT

119. Ms. Allen claims that the earliest published news story regarding the Texas verdict was September 20, 2001.[114] Ms. Allen also claims that there was no statistically significant price response to this disclosure of the $150 million verdict (of which $65 million was allocated to Halliburton).[115] There was in fact a stock price decline on September 20, 2001 of nearly 5%.[116] After correcting Ms. Allen's event study by including the Industry Peer Index, there is a negative price reaction on September 20, 2001 that is significant at the 90% confidence level, but not the 95% confidence level. After controlling for market and industry factors, Halliburton's stock price fell by $258 million. When compared against the potential financial impact implied by the verdict (up to $65 million), the data are entirely consistent with the market reacting negatively and to more than just the financial impact of the verdict itself.[117]

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[113] *See*, Section VII.

[114] Allen Report at ¶ 195.

[115] Allen Report at ¶196.

[116] Strangely Ms. Allen quotes a non-Halliburton analyst report that is actually covering Cooper Industries to support the point that Halliburton's stock price did not decline in reaction to the September 20, 2001 news. It is not clear from this analyst report what date the analyst was looking at to measure the price reaction of Halliburton to the Texas verdict.

[117] Within this section Ms. Allen also makes reference to her finding that there was not a significant reaction on December 4, 2001 to the $65 million verdict (Allen Report at ¶ 198 and ¶¶ 213-217). As already described in earlier sections, Ms. Allen's claim in ¶ 198 that the market did not respond to the adverse litigation outcome on December 4, 2001 is also incorrect and an artifact of her flawed event study.

120. Financial economists often draw inferences from results that are significant at the 90% confidence level. There is nothing magical about the 95% confidence level even though it is the threshold most often cited for statistical significance. In my view, the fact that September 20, 2001 is significant at the 90% confidence level would be sufficient economic evidence to infer that the market price of Halliburton fell as a result of the new news on September 20, which, as articulated by Ms. Allen, was the Texas verdict.

121. To support her argument that the negative litigation outcomes are not corrective of the fraud, Ms. Allen notes that the September Texas verdict was actually the largest of the adverse verdicts and yet there was no significant price response. Setting aside whether there was a negative and significant price response on September 20 or not, there is no doubt that the market reaction was greater after the later, yet smaller, adverse announcements. This fact pattern does not imply a lack of price impact. Indeed, it is entirely consistent with corrective learning.

122. As Ms. Allen argues, the market had been warned that there was the possibility of adverse litigation outcomes and that, nevertheless, Halliburton believed that such an outcome would not materially impact the Company.[118] The relatively muted response to the Texas verdict is entirely consistent with the market relying to a large degree on those very alleged false statements and omissions. In other words, the market largely (but not entirely) viewed the Texas verdict as an aberration that did not necessarily signal the expectation of enormous exposure to asbestos liabilities as a result of the verdict itself.

123. However, the market clearly changed its views in light of the series of additional adverse outcomes disclosed through and including the Maryland verdict on December 7, 2001. The fact pattern relied upon by Ms. Allen provides absolutely no evidence to refute price impact.

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[118] Allen Report at ¶ 152.

In fact, it is entirely consistent with Plaintiffs' overall claim that the market had been deceived by Defendants' public statements and the relevant truth came to light as a result of a series of adverse litigation outcomes. Indeed, Ms. Allen did not dispute at deposition that a series of adverse verdicts could be interpreted differently than a single verdict and that at some point there could be, as one Halliburton analyst succinctly put it, a proverbial "straw that breaks the camel's back".[119]

124. It is also worth noting that Ms. Allen, in both the Allen Report and at deposition, relies heavily on one phrase in the Complaint that implied the Texas verdict provided "stunning confirmation" of the fraud.[120] She extrapolates this phrase to imply that Plaintiffs' claim is only valid if the market understood from the Texas verdict Defendant's prior statements were false. For example, the Allen Report states:

> The Fund claims that the first of these verdicts, the Texas verdict on September 12, 2001, was **"**stunning confirmation**"** that Halliburton's prior statements regarding its asbestos exposure were "completely false." Yet, I found there was no price reaction after the public announcement of this verdict, and therefore no price impact. I similarly found no price reaction to the public announcement of the Mississippi verdict or the Texas judgment.[121]

125. She reiterates the point in her deposition:

> Q. So even with that assumption, why does that mean that the market will not look at the fourth adverse verdict or judgment disclosed by Halliburton in less than two months differently than it viewed the earlier verdicts or judgments?
>
> A. I don't think it necessarily means that, in and of itself, in terms of it being corrective of the alleged misrepresentations, it's, as I understand plaintiff's allegations, it's no more corrective, so plaintiff's claim that when the -- that the Mississippi verdict was stunning and confirmation that the prior statements regarding asbestos that the company made were false. To the extent that the Mississippi verdict was stunning confirmation that the prior statements were false,

[119] Allen Deposition, pp. 159:14-164:2.

[120] Complaint at ¶¶ 38, 182.

[121] Allen Report at ¶ 182 (emphasis added). Also see ¶¶ 193, 194, 201, and 228.

> this is no more stunning confirmation that the prior statements were false, so the corrective nature of the December 7th verdict is or the announcement of the Maryland verdict is no different in its corrective nature. I'm not saying the verdict isn't necessarily different.[122]

126. To the extent that the September 20, 2001 disclosure of the Texas verdict provided some limited corrective information, it is fair for Ms. Allen to say that the Complaint's use of the phrase "stunning confirmation" of the fraud is not a fair depiction of how the market interpreted the Texas verdict. Nevertheless, the fact the Complaint uses a phrase in one paragraph that is not a fair depiction of how the market reacted to one of a series of alleged disclosures cannot serve as an economic indictment of Plaintiffs' overall theory. For Ms. Allen to focus her opinion on this single phrase as a controlling depiction of Plaintiffs' theory is indicative of the fact that her arguments are not able to confront the more refined theory that Plaintiffs have articulated.

E. HALLIBURTON'S STOCK PRICE REACTED NEGATIVELY AND RAPIDLY TO HALLIBURTON'S OCTOBER 30, 2001 ANNOUNCEMENT OF THE MISSISSIPPI VERDICT, THUS DEMONSTRATING PRICE IMPACT

127. According to Ms. Allen's flawed event study (prior to using her "multiple comparisons" correction), Halliburton's stock price declined in a statistically significant manner on October 31, 2001 and the following day of November 1, 2001.[123] This coincides precisely with Halliburton's disclosure of the adverse Mississippi verdict. Ms. Allen identifies no "confounding" information that would imply Halliburton's stock price was reacting to some alternative information.

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[122] Allen Deposition, pp. 156:5 – 157:5 (emphasis added). Also see pp. 129:24 – 130:22, pp. 158:17 – 159:13,, pp. 160:6 – 161:20, pp. 162:23 – 164:2, pp. 172:23 – 173:25, p. 193:4 –15, and pp. 201:20 –202:20.

[123] Allen Report Exhibit 1a. As described above, there is also a statistically significant result after inclusion of the Industry Peer Index.

128. Aside from her attempt to use her "multiple comparisons" correction to characterize a 9.4% abnormal price decline that represents a loss of over $1 billion in market capitalization and an abnormal return otherwise significant at greater than the 99% level as "insignificant" due to her flawed "correction", the only other argument she offers to reject October 30, 2001 and November 1, 2001 as demonstrating price impact is that the verdict itself was first disclosed in a Mississippi newspaper on Sunday October 28 and Halliburton's stock price did not decline on Monday October 29, 2001.

129. It is entirely plausible that the vast majority of market participants did not become aware of the verdict (and thus its import) until Halliburton's own announcement. Many market participants may not regularly monitor Mississippi newspapers and, given that it resides in a different industry, many Halliburton investors may not have taken note of the 3M announcement of the verdict, especially since it did not mention Halliburton by name. The analyst reports Ms. Allen reviewed included two reports issued on October 29, 2001, and neither of them mentioned the Mississippi verdict, whereas analyst reports issued on October 31, 2001 discuss Halliburton's disclosure of the verdict on October 31 as new information.[124] Especially in light of the event study evidence, the analyst commentary, and the absence of confounding news, there is no reason to break the causal link between Halliburton's announcement of the verdict and the negative price reaction.

[124] "Surveying the Prospects – Oilfield Services Weekly Ruminations," *Deutsche Bank*, October 29, 2001; "Halliburton Company," *Johnson Rice & Company*, October 29, 2001; "HAL: Further Asbestos Developments," *SalomenSmithBarney*, October 31, 2001 ("Halliburton disclosed last night that a Mississippi jury had awarded $150m in compensatory damages to six plaintiffs in an asbestos suit."); "Asbestos Case in Small Mississippi Town Yields $150 Million Jury Award Against HAL, MMM and Others – Vigorous Appeal Expected," A.G. Edwards, October 31, 2001.

130. As shown on Exhibit 17, the two-day abnormal market capitalization decline of $539 million so far exceeds the implied financial impact of the verdict itself ($21.25m) that the market was clearly impounding additional information over and above the direct financial impact of the verdict itself. There was no concurrent decline in Ms. Allen's asbestos index on these days (in fact, her asbestos index was positive on both days) and therefore there is no evidence that a change in the asbestos climate is responsible for Halliburton's price decline. Therefore, there is a Halliburton-specific reason that the market reacted to the degree it did. A logical explanation is that the adverse litigation outcome caused the market to question even further the claim by Defendants that it would not face material asbestos liabilities. In other words, information was leaking into the market that partially corrected the prior misstatements and omissions, and the degree of price response on October 30 and November 1, 2001 provides evidence of price impact.

F. HALLIBURTON'S STOCK PRICE REACTED NEGATIVELY AND RAPIDLY TO HALLIBURTON'S DECEMBER 4, 2001 ANNOUNCEMENT OF ENTRY OF JUDGMENT OF THE TEXAS VERDICT AND THREE ADDITIONAL JUDGMENTS, THUS DEMONSTRATING PRICE IMPACT

131. Although Ms. Allen's flawed event study did not find Halliburton's stock price declined in a statistically significant manner on December 4, 2001 and the following day of December 5, 2001,[125] this is simply an artifact of her poorly specified event study regression which suffered from omitted variable bias. With inclusion of the Industry Peer Index, there is a statistically significant decrease over both a one and two day event window at above the 99% confidence level. These declines coincide precisely with Halliburton's disclosure of the court entering final judgment of $65 million against Halliburton in the Texas case and $35.7 million

[125] Allen Report Exhibit 1a.

regarding three additional asbestos-related judgments that had not been previously disclosed. Ms. Allen identifies no confounding information that would imply Halliburton's stock price was reacting to some alternative information.

132. Other than making the erroneous argument that the market price reaction to this news was not statistically significant, Ms. Allen rejects the news on this day as corrective because she contends that the $65 million judgment is not new information and that the $35.7 million is not corrective of any misrepresentation.[126] She is incorrect on both counts.

133. The $35.7 million represents judgments for unpaid settlement agreements. Ms. Allen provides no explanation as to why these judgments for unpaid settlements are not new information or unrelated to Plaintiffs' claims.

134. Furthermore, although the Texas verdict had been previously reported, the entry of judgment signals that the judge did not overturn the verdict. Clearly Halliburton also felt compelled to disclose this as new information and analysts reacted to the news as new. For instance a Merrill Lynch December 4, 2001 report states "Reason for Report: Asbestos Related Judgments." The analyst stated:

> These three cases [Texas, Mississippi, and the unrelated Dresser case] highlight the risk of relying on historical settlement rates for projecting HAL's potential future liability.
>
> New entrants into the asbestos litigation industry have upset administrative or rate-based settlements and are now more aggressively recruiting potential claimants and pushing for higher settlement amounts in court.
>
> At this point, we do not believe that HAL's ultimate asbestos liability will be crippling financially, but we reiterate our position that HAL is likely to repeat its

[126] Allen Report at ¶¶ 214-215.

pattern of underperforming as asbestos information is released even with the $10 asbestos discount already priced into the stock.[127]

135. A.G. Edwards reported:

In our view, these large jury awards are troubling due to the size of awards and jury findings appear to [be] based on the possibility of development of asbestos-related illnesses, not actual presence of asbestosis, a form of asbestos-related lung cancer, or mesothelioma, a cancer that is caused by exposure to asbestos. Nonetheless, HAL's asbestos liability remains large and the overhang could remain in place for the next several years in spite of HAL's vigorous defense (in part due to the lengthy appeals process).[128]

136. There was no concurrent decline in Ms. Allen's asbestos index on December 4 and 5, 2001 (in fact, her asbestos index was positive on both days) and therefore she cannot claim that a change in the asbestos climate is responsible for Halliburton's abnormal price decline. Therefore, there is a Halliburton-specific reason that the market reacted to the degree it did. The logical explanation is that the newly disclosed adverse litigation outcomes caused the market to question even further the claim by Defendants that it would not face material asbestos liabilities. In other words, information was leaking into the market that partially corrected the prior misstatements and omissions. If Plaintiffs succeed in proving that Defendants materially misled or omitted material facts about Halliburton's asbestos liability (and my understanding is that at this stage in the litigation the plaintiff's allegations about misrepresentations and omissions are presumed to be true) then the degree of price response on December 4 and 5, 2001 provides evidence of price impact.

G. HALLIBURTON'S STOCK PRICE REACTED NEGATIVELY AND RAPIDLY TO HALLIBURTON'S DECEMBER 7, 2001 ANNOUNCEMENT

[127] "Shares Underperforming Again As Asbestos Issues Flare," *Merrill Lynch*, December 4, 2001.

[128] "Asbestos News Continues to Develop – North American Drilling Market Weak and 2001-02 EPS Estimates Lowered," *A.G. Edwards*, December 5, 2001.

OF THE MARYLAND VERDICT, THUS DEMONSTRATING PRICE IMPACT

137. Despite Ms. Allen's flawed event study, and regardless of whether or not she applies her flawed "multiple comparisons" correction, Halliburton's stock price declined in a statistically significant manner on December 7, 2001 and the two day window of December 7 and 10.[129] This price drop coincides precisely with Halliburton's disclosure of the adverse Maryland verdict. Other than the items already identified and refuted in prior sections, Ms. Allen identifies no confounding information that would imply Halliburton's stock price was reacting to some alternative information.

138. Analysts reported this as new information. For instance PNC changed its outlook regarding Halliburton's asbestos liabilities in its December 7, 2001 report:

> The company has reserved $704 million ($125 million net of insurance recoveries) for asbestos litigation claims. Based on the company's claim settlement history (194,000 claims settled since 1976 at an average net cost per resolved claim of less than $200) and the number of open claims at the end of the third quarter (146,000), this reserve seemed more than adequate. **However, with the recent high levels of the judgments against the company (approximately $3 million per claim before insurance recoveries), we are concerned that this number may prove to be low.**
>
> Over the past two months Halliburton has had more than $150 million in judgments against it, reversing the positive trend we had seen regarding its asbestos liability in the third quarter (during which asbestos claims dropped over 50% sequentially). The company believes that it has strong legal grounds on which to expect reversals of these judgments on appeal. Unfortunately, we believe it may take years before these appeals are resolved and that the fear of additional judgments against the company will make it difficult for the stock to significantly appreciate from current levels. **Therefore, because of the acceleration of negative judgments and the length of potential appeal processes, we are downgrading our rating on the shares to Market Perform**. We would look to

[129] Allen Report Exhibit 1a.

gain exposure to the oil service sector through Baker Hughes (despite its higher valuation) due to the pure-play nature of its business.[130]

139. Other analysts linked the decline in stock price directly to the asbestos verdicts:

> Halliburton's stock is trading down significantly today, as the Company announced yet another significant award against the Company for asbestos related litigation.[131]
>
> Shares of Halliburton are down sharply as of 2pm eastern time on the sizeable award. This is the fourth significant judgment against Halliburton since late October. The size of this claim ($6 million per plaintiff) is materially higher than Halliburton's historical average cost per claim of less than $200.[132]
>
> Halliburton's shares plunged 42.4% on Friday and 44% for the week ended December 7, 2001 as negative new regarding the company's asbestos problems poured into the market.[133]

140. In support that these verdicts were corrective of Halliburton's misstatements and omissions, a Jefferies analyst stated:

> This morning Halliburton indicated that a Baltimore jury has awarded $30 million in damages against its Dresser subsidiary.
>
> This follows two recent significant adverse verdicts against the company.
>
> These are surprising developments following management's rather positive asbestos update during its 3Q01 conference call on October 23. During the conference call management had provided further assurances that current reserves are adequate to cover projected asbestos liabilities. We now believe that HAL'S asbestos-related net liabilities could be significantly higher than currently estimated (estimated at $125 million by the company).[134]

141. Regardless of Ms. Allen's faulty event study regression and improper "multiple comparisons" correction, she finds that Halliburton's excess return on December 7, 2001 to be statistically significant. Exhibit 17 shows that the 40% price decline that represents a loss of

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[130] "Rating Change," *PNC Advisors*, December 7, 2001 (emphasis added).

[131] "Halliburton Co.," *Hibernia Southcoast Capital*, December 7, 2001.

[132] "Halliburton Shares Decline on Asbestos Claim," *JP Morgan*, December 7, 2001.

[133] "Shares Plunge on Asbestos Uncertainty," *ABN-AMRO*, December 10. 2001.

[134] "Halliburton Company," *Jefferies*, December 7, 2001.

nearly $3 billion in market capitalization and analysts overwhelmingly state that the price decline is a direct result of what Plaintiffs' allege is corrective information.

142. As Exhibit 11 showed, the decline in the asbestos index over these two days cannot explain the great majority of the price decline. As I have explained in earlier sections, Ms. Allen's attempts to claim that the price change on December 7, 2001 was due to general volatility, market uncertainty, Enron, or any other non-culpable cause, fail to provide any economic evidence of such claims. Instead, her event study (however flawed), the analyst commentary from her securities analysts, and the absence of confounding news, all indicate that there is no reason to break the causal link between Halliburton's announcement of the verdict and the negative price reaction.

143. As shown on Exhibit 17, the market capitalization decline of $2.9 billion so far exceeds the implied financial impact of the verdict itself ($30m) that the market was clearly impounding additional information. The logical explanation is that the additional adverse litigation outcome caused the market to question even further the claim by Defendants that it would not face material asbestos liabilities. In other words, information was leaking into the market that partially corrected the prior misstatements and omissions. The degree of price response on December 7-10, 2001 provides evidence of price impact.

IX. THERE WAS PRICE IMPACT ASSOCIATED WITH THE JUNE 28, 2001 HALLIBURTON ANNOUNCEMENT DISCLOSING THE REQUEST FOR FINANCIAL ASSISTANCE FROM HARBISON-WALKER

144. Paragraph 74 of the Complaint reads as follows:

> The dispute between Dresser and Global was first disclosed by Halliburton in its 1998 Form 10-K filed with the SEC on 3/23/99 ("1998 10-K"), nearly a year after the merger was approved by Halliburton and Dresser shareholders. The 1998 10-K described the assertions by Global as being "without merit" and went on to state that the asbestos claims pending against Dresser at the end of 98 would "be

> resolved without material effect on Halliburton's financial position or results of operations." However, regardless of the merits of Global's assertions, it was clear to defendants that Halliburton would be forced to shoulder the responsibility for the asbestos claims filed against Harbison-Walker and Dresser if Harbison-Walker was financially unable to honor the Spin-off Agreement. This risk was never fully disclosed to the investing public; nor was it properly accounted for during the Class Period.

145. If I assume the truth of Plaintiffs' allegation that Defendants withheld material information about Halliburton's liabilities for potential claims, including its liability for potential claims against Harbison-Walker (because Harbison-Walker was once part of Dresser), then a price reaction to the release of the relevant truth provides evidence of price impact.

146. It is undisputed that on June 28, 2001 Halliburton disclosed that Harbison-Walker had requested that Halliburton provide it with financial assistance for asbestos claims.[135] In relevant part, the 8-K stated:

> On June 28, 2001 registrant issued a press release entitled "Harbison-Walker Asks Halliburton For Assistance With Asbestos Claims" pertaining, among other things, to an announcement that Harbison-Walker Refractories Company ("Harbison"), formerly owned by registrant's subsidiary, Dresser Industries, Inc., ("Dresser") has requested that Dresser provide Harbison with claims management and financial assistance for asbestos claims Harbison assumed when it was spun-off from Dresser in 1992.[136]

147. There is a direct logical, economic, and foreseeable causal link between Plaintiffs' allegation (that the Company misrepresented, including through omissions, its liabilities for potential claims, including claims against Harbison-Walker) and the alleged corrective disclosure (that Harbison-Walker would require financial assistance as a result of its exposure to asbestos claims and that Halliburton would reserve $50-60 million net of insurance recoveries to help with those claims). The Allen Report does nothing to sever this logical link. In fact, she quotes

[135] Halliburton 8-K filed June 29, 2001; Allen Report at X.B.1.

[136] Halliburton 8-K filed June 29, 2001, p. 1.

an analyst that draws a direct link between the June 28 announcement and the original statements made in prior SEC filings. She quotes an A.G. Edwards report as follows:

> In its previous SEC filings, Halliburton did not include any of the above H-W asbestos claims, or its estimated liability, due to its reliance on the defense and indemnity obligations H-W assumed under its 1992 spin-off agreement. However, H-W no longer appears to have the financial ability to comply with its defense and indemnity agreement.[137]

148. A similar linkage is made in Halliburton's own 8-K issued on June 28, 2001:

> Halliburton is now investigating Harbison's asbestos claims, including the status of various completed and proposed settlements and, open unsettled claims, and the financial condition of Harbison and its affiliates. Based on information received, Halliburton believes that Harbison now has about 165,000 open claims of which approximately 52,000 are subject to various settlement negotiations or agreements. **These claims have not been previously reported by Halliburton because of Harbison's agreement to assume full responsibility for these claims and to indemnify and defend Dresser against them.** If Halliburton determines that Harbison is not able to perform adequately its obligations under the assumption agreement and that it is in Halliburton's best interest to do so, Halliburton may take the primary role for management and resolution of Harbison's claims. A decision in this regard is expected in the next several weeks.[138]

149. As a result, if Plaintiffs are able to prove that Halliburton's statements were materially false, misleading or omitted material information (such as Halliburton's knowledge that Harbison-Walker would need financial assistance), which should have alerted the market to its heightened exposure for potential claims, including claims against Harbison-Walker, there is a clear causal link between those statements and the ultimate announcement that Halliburton would have to shoulder financial responsibility for those same asbestos claims.

150. Furthermore, it is undisputed that prior to application of Ms. Allen's flawed "correction" for multiple comparisons there was a negative and statistically significant price

[137] Allen Report at ¶ 287.

[138] Halliburton 8-K filed June 29, 2001, p. 5 (emphasis added).

response to this information according to her own event study model.[139] My analysis confirms that there was a negative and statistically significant price reaction in either the one or two day event window following the disclosure that Harbison-Walker was requesting financial assistance, both before and after correcting for Ms. Allen's omitted variable bias.[140]

151. Based on the foregoing, I conclude there is evidence of price impact stemming from the alleged misstatements and omissions regarding Halliburton's exposure to asbestos liabilities from Harbison-Walker.

152. Besides her erroneous claim that there was no statistically significant price reaction to the announcement on June 28, 2001, Ms. Allen's other arguments as to why there is no price impact are baseless. Her assertions include:

(1) The Complaint does not allege that Halliburton made any statement prior to June 28, 2001 that misrepresented any communication between Harbison-Walker and Halliburton, or the relationship between Harbison-Walker's and Halliburton's asbestos liabilities;[141]

(2) There is no indication that the market believed the June 28, 2001 announcement revealed a falsity;[142]

(3) The market was aware of the indemnity relationship between Harbison-Walker and Dresser;[143]

(4) Halliburton continued to update the status of this litigation in its SEC filings;[144]

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[139] Allen Report at ¶ 289.

[140] See Exhibit 4a and 4b. Furthermore, even though unnecessary, application of the Holm-Bonferroni "correction" for multiple comparisons confirms the price response to this event is statistically significant (See Exhibit 6).

[141] Allen Report at ¶ 282.

[142] Allen Report at ¶ 282.

[143] Allen Report at ¶ 283.

(5) Analysts did not indicate they were previously misled;[145] and

(6) Harbison-Walker's costs per claim were higher than Halliburton's and analysts stated that it may be a "positive" for Halliburton to step in to manage the claims.[146]

153. Arguments (1), (3) and (4) all speak to whether or not there was or could have been a material misrepresentation, not to whether there was price impact if indeed there was a material misrepresentation. In other words, even if (1), (3), and (4) are all true, I understand plaintiffs still allege the market was deceived by material misrepresentation and omissions with regard to Plaintiffs' claims. In particular, argument (1) focuses only on whether there were misstatements about specific communications or about the nature of the relationship itself. Plaintiffs do not allege that is what was misrepresented or omitted. Argument (3) simply suggests the market was aware of the indemnity relationship. Plaintiffs do not allege that information was withheld. Argument (4) simply suggests that Halliburton provided some updates, which does not preclude misstatements or omissions in those updates. None of these arguments are relevant to the price impact question.

154. Arguments (2) and (5) both relate to whether analysts specifically understood or articulated that the June 28, 2001 announcement was an admission of a prior falsity. Contemporaneous recognition by analysts that new information represents a correction of a prior falsity is not necessary for the information itself to be corrective. This was acknowledged by

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[144] Allen Report at ¶ 284-285.

[145] Allen Report at ¶¶ 286-287.

[146] Allen Report at ¶ 288

Ms. Allen in her deposition.[147] As a result, these arguments do not preclude a finding of price impact.

155. Finally, it is entirely unclear what relevance argument (6) has to the price impact analysis and Ms. Allen does not clearly articulate its relevance. The announcement that Halliburton would be taking on millions of dollars in additional asbestos exposure was clearly not seen as a “positive” by the market as evidenced by the statistically significant negative stock price decline that was observed.

156. In sum, none of the arguments in the Allen Report preclude price impact related to the June 28, 2001 corrective disclosure.

X. THERE WAS PRICE IMPACT ASSOCIATED WITH THE AUGUST 9, 2001 RELEASE OF ADDITIONAL DATA DETAILING HALLIBUTON’S EXPOSURE TO ASBESTOS CLAIMS

157. Besides adverse litigation outcomes, another foreseeable way the market could learn the relevant truth about Halliburton’s allegedly misrepresented exposure to asbestos liabilities is through gaining more information that was not previously available about the claims filed against the company. On August 9, 2001 the Company released a 10-Q which provided additional detail regarding its exposure to asbestos liability, the number of claims being filed, and also, consistent with a previous announcement, raised its net asbestos liability reserve.

158. While the Complaint alleges that the increase in asbestos reserves from $30 million to $124 million was new information that corrected the alleged misstatements, Ms. Allen correctly points out in her analysis that this increase in reserves had already been previewed to

[147] Allen Deposition, p. 103:5-10.

the market back on July 25, 2001.[148] However, her broader claim that "there was *no new information* in the 10-Q regarding Halliburton's asbestos reserves or its liability for Harbison-Walker claims" is not correct.[149]

159. Within the 10-Q filing, for the first time Halliburton detailed its gross asbestos liabilities. In particular it showed that Halliburton's gross asbestos liabilities had grown from $80 million at the beginning of the year to over $699 million as of June 30, 2001.

> "When you look at the growth in claims and you look at these numbers, we're concerned," said Scott Gill, an analyst with Houston-based energy investment bank Simmons & Co...
>
> Gill said the information about asbestos claims – which date back to the 1970s – was far more detailed than the company had made in 10-Q statements in previous quarters.
>
> . . .
>
> Previous 10-Q filings by Halliburton had not spelled out the extent of the gross liabilities."[150]

160. The 10-Q also noted:

> During the second quarter of 2001, we experienced an upward trend in the rate that new asbestos claims are filed against us.[151]

161. Contemporaneous news stories did not identify any new or unexpected information in the 10-Q other than information about Halliburton's asbestos liabilities.[152] There is also no dispute that prior to her erroneous "correction" for multiple comparisons, both Ms. Allen and I

[148] See Allen Report at ¶¶ 294-297.

[149] Allen Report at ¶ 293 (emphasis in original).

[150] "Halliburton Stock Down as Asbestos Liability Rises," *Reuters News*, August 9, 2001 19:12.

[151] Halliburton 2Q01 SEC Form 10-Q filed August 9, 2001, p 26.

[152] For example, *see*, "Halliburton Stock Down as Asbestos Liability Rises," *Reuters News*, August 9, 2001 19:12 ("Halliburton Co, the world's No. 1 oilfield services firm, saw its stock fall 4.5 percent on Thursday after the company released information showing a sharp increase in its asbestos litigation liability. […] Previous 10-Q filings by Halliburton had not spelled out the extent of the gross liabilities.").

find a statistically significant price response over both a one and two day event window following disclosure of this additional information.[153] This disclosure demonstrates price impact because the market clearly responded negatively to additional information about Halliburton's gross asbestos liabilities and the rate of claims being filed, which was important information for the market to assess Halliburton's true exposure to asbestos liabilities, which was alleged to have been concealed.

XI. MS. ALLEN'S OTHER ARGUMENTS REGARDING PRICE IMPACT FROM THE ASBESTOS MISREPRESENTATIONS AND OMISSIONS ALSO FAIL

162. Stepping away from her specific analysis of the corrective disclosures themselves, Ms. Allen also offers a number of other reasons she believes there is a lack of price impact resulting from the alleged misrepresentations and omissions related to Halliburton's exposure asbestos liabilities. These arguments are detailed from ¶155 to ¶177 of the Allen Report. My responses to her arguments are contained in the following subsections.

A. HALLIBURTON'S PRIOR DISCLOSURES DO NOT PRECLUDE FRAUD OR ITS CORRECTION

163. One of Ms. Allen's arguments she claims supports her finding of no price impact is that Halliburton had publicly disclosed detailed information about its estimated asbestos liability, including making clear that its reserves only accounted for pending, rather than future claims.[154] Within that section she lists a series of information that was publicly available to the market during the Class Period.[155] Even if true, it is not clear what economic principle Ms. Allen is applying as an expert to suggest that this precludes price impact. Plaintiffs' claim is not that

[153] Allen Report at ¶ 299; Allen Report Exhibit 1; Exhibit 4b to this report.

[154] Allen Report at ¶ 152.

[155] Allen Report at ¶¶ 155-160.

Halliburton was silent about its exposure to asbestos claims. Plaintiffs acknowledge what Halliburton had said publicly. I also understand Plaintiffs allege Halliburton made misstatements related to future claims even if their accounting reserve explicitly excluded future claims.

164. Ms. Allen simply provides no relevant economic argument about why the information available to the market precludes Halliburton from misleading the market. And if there indeed was a fraud, which is the starting assumption of her analysis, it is especially unclear how the availability of the information she cites precludes a correction of that fraud. This argument is therefore irrelevant to the price impact question.

165. Within the same section Ms. Allen anecdotally compares the disclosure practices of other firms with that of Halliburton during and after the Class Period.[156] Ms. Allen does not appear to draw any particular economic conclusion from this information and it is not clear how this information pertains to price impact. To the extent she is suggesting this implies Halliburton did not mislead investors, that would be a liability rather than a price impact argument.

B. ANALYST CHARACTERIZATION OF HALLIBURTON'S DISCLOSURE PRACTICES DOES NOT SPEAK TO PRICE IMPACT

166. Ms. Allen asserts that certain market commentators characterized Halliburton's disclosures about asbestos liability as "particularly forthcoming."[157] First, whether or not Halliburton's disclosure practices were in fact "forthcoming" is at the heart of the liability issue in this case, which for purposes of price impact we are assuming their disclosure practices were not "forthcoming". Second, Ms. Allen's "evidence" consists of eight quotations by the press or

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[156] Allen Report at ¶¶ 162-164.

[157] Allen Report at ¶ 166.

analysts. Only two of those actually describe Halliburton's disclosures as "forthright" or "forthcoming" and neither is actually in a position to compare what Halliburton disclosed versus what they actually knew unless they were privy to inside information.[158] Hence, it is not clear what economic principle Ms. Allen is appealing to when suggesting this information somehow precludes price impact. Just because two analysts have formed subjective opinions about Halliburton's forthrightness does nothing to preclude a fraud or ultimate correction of that fraud.

C. ANALYST RECOGNITION OF INFORMATION AS CORRECTIVE IS NOT NECESSARY FOR THERE TO BE A CORRECTIVE DISCLOSURE

167. Ms. Allen argues that lack of price impact is supported because no analyst claims to have been misled.[159] There is no economic principle suggesting that securities analysts or investors generally must acknowledge being misled for there to have been corrective information released. Indeed, Ms. Allen testified at deposition that it is not necessary for the market to recognize it had been misled for new information to be corrective of an alleged fraud.[160] As a result, even if correct, her evidence does not preclude a finding of price impact from the misrepresentations and omissions.

168. As discussed above, the magnitude of the market reaction itself, including Ms. Allen's Chow test which showed the market treated Halliburton as an "asbestos company" starting December 7, 2001, demonstrates that the market significantly discounted the notion that Halliburton would not be materially impacted by its asbestos liabilities as Defendants had asserted.

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[158] Allen Report at ¶ 166

[159] Allen Report at ¶ 167.

[160] Allen Deposition, pp. 102:12-103:4.

D. WHETHER ANALYSTS BELIEVED HALLIBURTON WAS "EFFECTIVELY MANAGING ITS ASBESTOS LIABILITIES" AS ASSERTED BY MS. ALLEN IS IRRELEVENT TO PRICE IMPACT

169. The Allen Report asserts that analyst commentary suggests Halliburton was "effectively managing its asbestos liability."[161] This argument is being used to support her conclusion that "The disclosures and analyst commentary before and after the alleged corrective disclosures demonstrate the absence of price impact."[162] As an economist, it is not clear what economic principle Ms. Allen is appealing to for this argument. Whether a couple of analysts (which do not necessarily reflect the beliefs of the entire market) have expressed an opinion that Halliburton has "effectively managed" its asbestos liability is irrelevant to whether Halliburton committed fraud (which is assumed) or whether the market reacted to corrective information.

170. To the extent she is arguing that analysts expressing positive opinions about the companies they cover precludes the possibility that the company has issued corrective information, her argument makes no economic sense. Halliburton could have obscured the truth about its asbestos liabilities, the market could have absorbed corrective information as a result of the series of adverse litigation outcomes, and analysts could still hold the opinion that Halliburton has an effective legal strategy for managing its asbestos liabilities. The latter analyst opinions do nothing to preclude the former fraud and correction.

E. THE PATTERN IN THE AVERAGE COST PER CLOSED CLAIM IS IRRELEVANT TO THE PRICE IMPACT INQUIRY

171. The Allen Report contends that Halliburton's average cost per closed claim was fairly constant during the Class Period and compared favorably against other asbestos

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[161] Allen Report at page 75, heading X.A.3.

[162] Allen Report at page 75, heading X.A.3.a.

companies.[163] There is absolutely no discussion in the Allen Report of what relevance this has to the price impact analysis, nor do I see any relevance. Moreover, I understand her figures ignore how the gross costs per claim would be altered if Halliburton were forced to address how the judgments already rendered against it (but that had not yet been paid or resolved) would impact the cost per claim, or how they would alter the cost of resolving claims going forward.

172. Moreover, while irrelevant anyway, it is unclear why Ms. Allen is not comparing Halliburton to the other companies in her "asbestos index." In sum, there is no relevant conclusion regarding price impact to be drawn from her comparison, and she articulates none.

F. THE LACK OF ANALYST REACTION TO HALLIBURTON'S ASBESTOS RESERVE FIGURES RELEASED ON JANUARY 23, 2002 DO NOT SUGGEST A LACK OF PRICE IMPACT

173. Ms. Allen asserts that:

> The fact that analysts did not comment or express any surprise that the Company's net asbestos liability was unchanged [from prior to the end of the Class Period] demonstrates that the alleged corrective disclosures could not have disclosed to the market that the prior reported asbestos liabilities were understated or misleading. If analysts believed that the December verdict announcements revealed that Halliburton's previously disclosed estimates were wrong and misleading, they would have been surprised by the lack of change in the following quarter.[164]

174. Through the series of adverse litigation outcomes (which resulted in an abnormal market capitalization decline of over $4.5 billion), the market clearly was no longer relying on Halliburton's accounting reserve of $125 million as a benchmark for how to value Halliburton's exposure to asbestos liabilities. Even after the market price of Halliburton stock fell by over 42% on December 7, 2001, Halliburton came out the very next day and explicitly defended its process

[163] Allen Report at ¶¶ 172-174.

[164] Allen Report at ¶176.

for calculating the reserve and gave no indication it was going to change.[165] Therefore, Halliburton had already set the market expectation that it did not intend to change the method by which it accounted for asbestos reserves, even in light of the adverse litigation outcomes. As a result, the fact that analysts did not express "surprise" that the accounting reserve did not change says nothing about whether the market reaction to the adverse litigation outcomes provide evidence of price impact.

175. Indeed, when Halliburton finally increased its accounting reserve from $125 million to $168 million, and ultimately to $602 million,[166] analysts did not express "shock" or "surprise" at Halliburton having increased its asbestos reserve either. Indeed, one analyst said, "Management **finally admitted, following the appointment of an independent third party to conduct a study, that it has underestimated the extent of asbestos exposure**."[167] Another contrasted these more "realistic" measures against the prior method for calculating the reserve:

> Historically, Halliburton has only recognized an asbestos liability for its known claims at average historical cost. Based on the results of the study, Halliburton will increase the size of its asbestos liability to represent all current and potential future claims at a realistic cost, we believe. …

[165] In Halliburton's 8-K filed December 7, 2001, the Company claims, "our financial disclosure is accurate and complete." Additionally, during Halliburton's December 10, 2001 conference call, Vice President and CFO Doug Foshay said, "We've reserved all claims filed against us at our historical average cost per claim. We continue to believe this is the most accurate possible estimate." (page 7); On the same call, CFO Les Coleman added, "However, by following our current strategy combined with our existing insurance coverage and our substantial we believe we can resolve our pending asbestos claims without a material adverse impact on our company." (page 17); CEO Dave Lesar later stated "I can assure you and everyone listening we are looking at all options with respect to uh mitigating our exposure and getting the street more comfortable that this is an issue that I really must uh kind of come back and reinforce that we, as a management team and a company, do not believe is going to have a, a significant financial impact on the company going forward." (page 27).

[166] Halliburton 1Q02 SEC Form 10-Q filed May 8, 2002, p. 13; Halliburton 3Q02 SEC Form 10-Q filed November 8, 2002, p.16 and 31 ("During the quarter, we received an asbestos econometric report from Hamilton, Rabinovitz & Alschuler, Inc. Based upon this report we accrued an additional asbestos pretax charge of $483 million and increased our net asbestos liability to $602 million.").

[167] "Energy Market Flash," *Credit Suisse,* July 25, 2002 (emphasis added).

> We believe the conclusions and data yielded by the report will be useful to Halliburton and investors, whatever the findings. The main benefits are as follows, in our view:
>
> - it will provide an unbiased view of Halliburton's ultimate asbestos liability for investors, creditors and customers; …
>
> - the existence of credible third-party estimates of Halliburton's asbestos exposure may enhance the ability of the company to access the reinsurance market.[168]

176. In other words, analysts recognized the market, as a result of reacting to the corrective disclosures, had already priced in far greater liabilities than implied by the reserves and were not surprised when Halliburton ultimately did increase their reserves. Consistent with Plaintiffs' claims, the market and analysts had already largely incorporated the knowledge that such reserves would ultimately be necessary, despite the company's insistence that its reserve of $125 million as of December 7, 2001 and January 23, 2002 was sufficient.

177. In light of this evidence, Ms. Allen's suggestion that a lack of an analyst response after the end of the Class Period to expected news about Halliburton's process for calculating its accounting reserve somehow defeats price impact makes no economic sense.

XII. THERE IS EVIDENCE OF PRICE IMPACT WITH RESPECT TO PLAINTIFFS' ACCOUNTING CLAIMS

178. As discussed in Section IV, Plaintiffs' allege that Halliburton booked revenue related to cost overruns or change orders for which it had no contractual guarantee to recover from customers and for which collection was not "probable." I assume for purposes of my analysis, as did Ms. Allen, that Halliburton indeed booked unapproved claim revenue in violation

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[168] "HAL Announces Charges for Asbestos, Reorganization," *Morgan Stanley*, July 23, 2002.

of GAAP and SOP 81-1 and therefore overstated revenue in its public filings during the Class Period.

179. There are a number of ways that the relevant truth about a misstatement of revenue can ultimately be revealed to the market. For example, there could be a direct and explicit restatement of revenue. Alternatively, the relevant economic truth could be revealed indirectly through subsequent earnings reports that make clear the trend in revenue growth implied by a prior overstatement of revenue was not sustainable. Moreover, it could come from the announcement of an SEC investigation, a whistleblower, or any number of other ways.

180. In this particular matter, there is an explicit and direct link between the alleged misrepresentation/omission and the corrective information. On December 21, 2000, Halliburton issued a charge against earnings, that among other things, wrote down the value of previously booked revenue where collection was no longer deemed "probable." If Plaintiffs' claims are true, which is assumed, then this charge against earnings represents information that corrects the alleged fraud.

181. Based on my review of what had previously been disclosed, this was unexpected new and negative information. Popular press and analysts covering the news on this day opined that the write-down of project costs was surprising negative news. For example,

> Halliburton announced a restructuring of its engineering and construction business and 4Q charges of $120 million after tax.…**The charges are surprisingly large.**[169]

> Although these project adjustments will undoubtedly have a positive impact on E&C profitability in 2001-2, **the extent of the adjustments is much wider than**

[169] "HAL: Restructuring of E&C Business Positions Halliburton for Growth," *Salomon Smith Barney*, December 21, 2000, p.1 (emphasis added).

> **previously thought**, in our view, and is evidence that execution problems have also had a negative impact on E&C operating results.[170]
>
> Two investment analysts who follow Halliburton **expressed some unhappiness about the write-off from cost overruns and higher expenses, which came as a surprise to them**.
>
> …
>
> Jim Wicklund, analyst with Dain Rauscher Wessels in Dallas, said excluding the charges makes it difficult for investors to compare Halliburton's earnings from quarter to quarter. It isn't the first time Halliburton has written off cost overruns on projects, he said. 'This is $95 million in charges where they had significant costs overrun and seven projects that they had cost increases that they haven't been able to pass along. With no offense meant toward Halliburton, that's a lack of good contingency consideration,' he said.[171]

182. Prior to her erroneous "correction" for multiple comparisons, there is also no dispute that over the two-day window following this disclosure, there was a negative and statistically significant decline in Halliburton's stock price. Therefore, there is economic evidence of price impact based upon applying a well-accepted event study methodology.

183. Ms. Allen points out that there is not a statistically significant stock price movement for the full day on December 21 in isolation.[172] My analysis is consistent with that finding.[173] Furthermore, she notes that using an intraday analysis, December 22, 2000 only becomes significant because of a decline in the intraday price at the end of the day. She therefore raises questions as to whether the news released prior to the market opening on December 21, 2000 could be the cause of the stock price decline at the end of the day on December 22, 2000.[174]

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[170] "E&C Business Restructuring Formally Announced," *A.G. Edwards*, December 21, 2000, p.1 (emphasis added).

[171] "Dallas-Based Oil Services Firm Halliburton to Take $120 Million Charge," *MCT Business News*, December 22, 2000 (emphasis added).

[172] Allen Report at ¶ 86.

[173] *See*, Exhibit 4b

[174] Allen Report at ¶ 86.

184. One important principle in performing statistical analyses is to have a consistent approach so that subjective judgment, while never completely eliminated, plays as limited a role as possible. When analyzing the impact of December 7, 2001, Ms. Allen focused on a two-day window. She also applied statistical tests elsewhere to evaluate the price movement on the second day after other corrective disclosures. Ms. Allen also acknowledges that using multiple day event windows is observed in the event study literature.[175] For purposes of evaluating December 21 and December 22, 2001, however, Ms. Allen is now raising an issue regarding the intraday timing of the price movement. This is a departure from the method by which she analyzed all the other events.

185. If Ms. Allen is going to engage in an intraday analysis, she must also consider what happened intraday on December 21, 2000. **Exhibit 18** shows the intraday abnormal price movement over December 21 and December 22, 2000 using Ms. Allen's Regression that includes the Industry Peer Index. **Exhibit 18** demonstrates that there was an increasingly negative abnormal return over the first half of December 21 that crossed the threshold for 90% significance.[176] This suggests that based on intraday analysis I can reject randomness as the cause of the price decline at certain points during December 21, 2001 and thus there is affirmative economic evidence of price impact on December 21, 2001 without reliance on the two-day window.

186. Taking all of the information together, there is evidence of price impact. Within a half of a day of the release of the corrective information the stock price declined by an amount

[175] Allen Deposition, pp. 277:9-278:25.

[176] It is important to note that even though I show the significance thresholds as constant throughout the day, in reality, the threshold is something that would increase over the course of the day because the degree of "randomness" over a full day is greater than a partial day. Therefore, I am understating the degree of statistical significance during the day.

that is significant at the 90% level. Analysts and news reports commented on how the write-down was a negative surprise. While there was an increase in the price intraday toward the end of December 21, this interim increase abated and the stock price fell further on December 22 within the two-day event window. The price decline during this two day window is statistically significant at the 95% confidence level. Use of a two-day window is consistent a well-accepted event study methodology which I have applied on every other corrective disclosure event and is also consistent with Ms. Allen's focus on a two-day return following December 7, 2001. These data are all consistent with price impact.

187. Moreover, nothing in Ms. Allen's approach rules out the possibility of price impact. First, she does not identify an alternative or confounding cause of the decline that occurred at the end of the day on December 22, 2000. Indeed, she testified at her deposition that she searched for confounding news but could not find any. She further testified that she noticed high volume and a substantial change in price for one of Halliburton's closest peers (Schlumberger) at the end of the day on December 22, 2000, however she never identifies a reason for this, did not include any such evidence in her report, did not list intraday data for Schlumberger in her "materials considered", did not provide the data as part of her backup material, and did not identify any Schlumberger specific news that would indicate a confounding factor at work.

XIII. MS. ALLEN'S CONCLUSION REGARDING THE OCTOBER 23, 2001 ALLEGED MISSTATEMENT OR OMISSION IS INCORRECT

188. In the final section of her report, Ms. Allen asserts there was no price impact with respect to the statement that there had been "no adverse developments" with respect to the

Harbison-Walker situation.[177] Halliburton issued this statement in October even though the Texas verdict had occurred in September. Ms. Allen asserts there was no price impact because the market was already clearly aware of the Texas verdict. I do not dispute the market was aware of the Texas verdict prior to October 23, 2001. However, I understand that Plaintiffs' allegation regarding this misstatement or omission goes beyond just the failure to report the Texas verdict, and therefore Ms. Allen's argument is not sufficient to conclude a lack of price impact with regard to this alleged misstatement or omission.

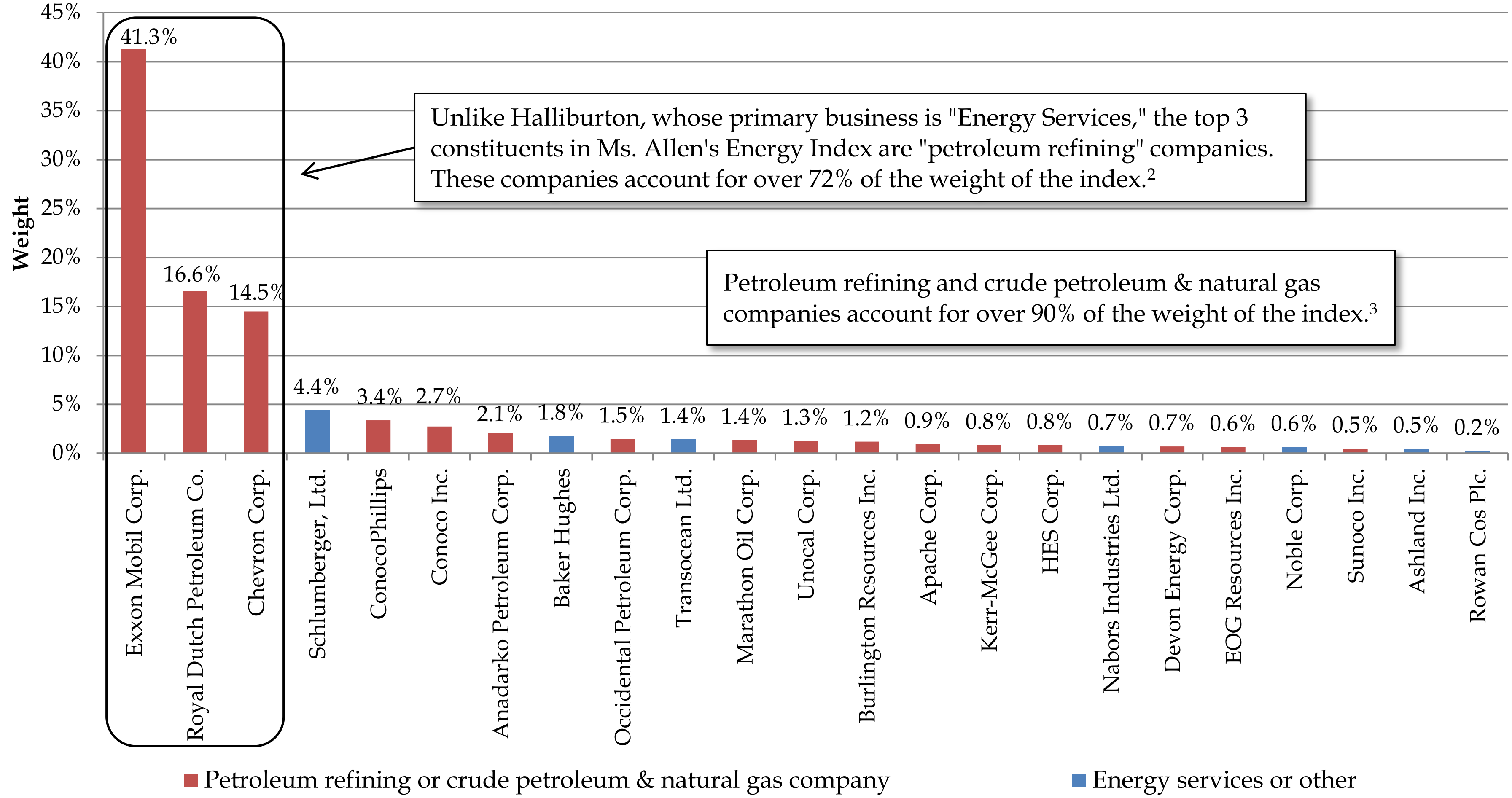
Respectfully submitted on October 30, 2014

Chad Coffman

[177] Allen Report at ¶¶ 303-305.

Exhibit 1.

Weights of Companies in Ms. Allen's Energy Index (S&P 500 Energy Index)



Source: Allen Report Backup Material, SEC filings

[1] Weights as of 12/1/2001. While the weights change slightly over time, the same general pattern exists throughout the Class Period. For example, on the first day of the Class Period, the top 3 constituents, Exxon, Royal Dutch, and Chevron, represent 58% of the index and they range between 56% and 73% of the index in Ms. Allen's analysis. Indeed, including the other petroleum refining and crude petroleum & natural gas companies in the total shows that they account for over 90% of the index as of 12/1/2001. This ranges from 87% to 93% over the Class Period.

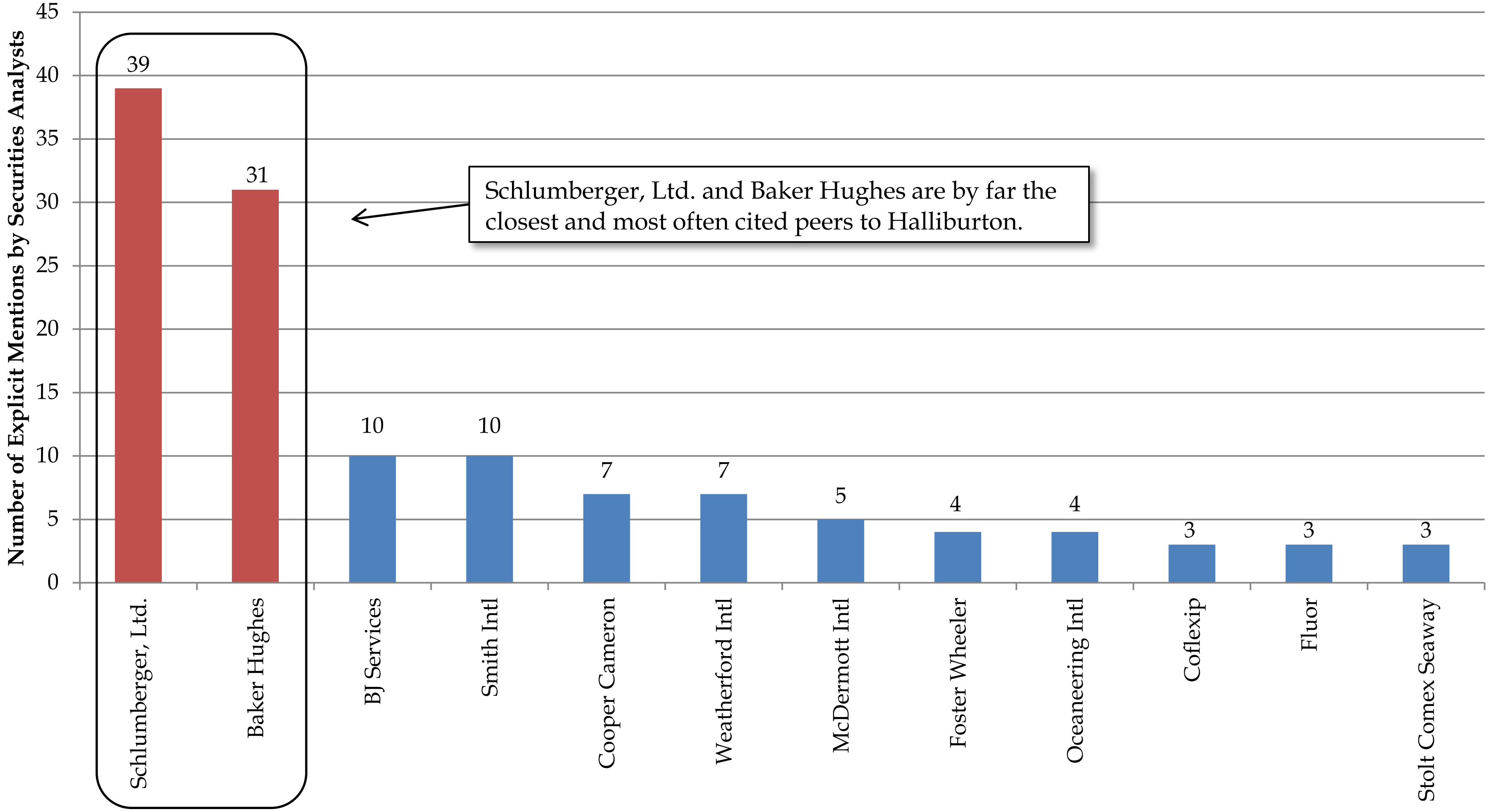
[2] "Petroleum refining" is the Standard Industrial Classification (SIC) of these three companies as determined by the Securities and Exchange Commission. The SIC indicates a company's type of business.

[3] "Petroleum refining" and "crude petroleum & natural gas" are the SICs for these companies.

Exhibit 2.

Companies Identified by Securities Analysts as Peers to Halliburton[1]

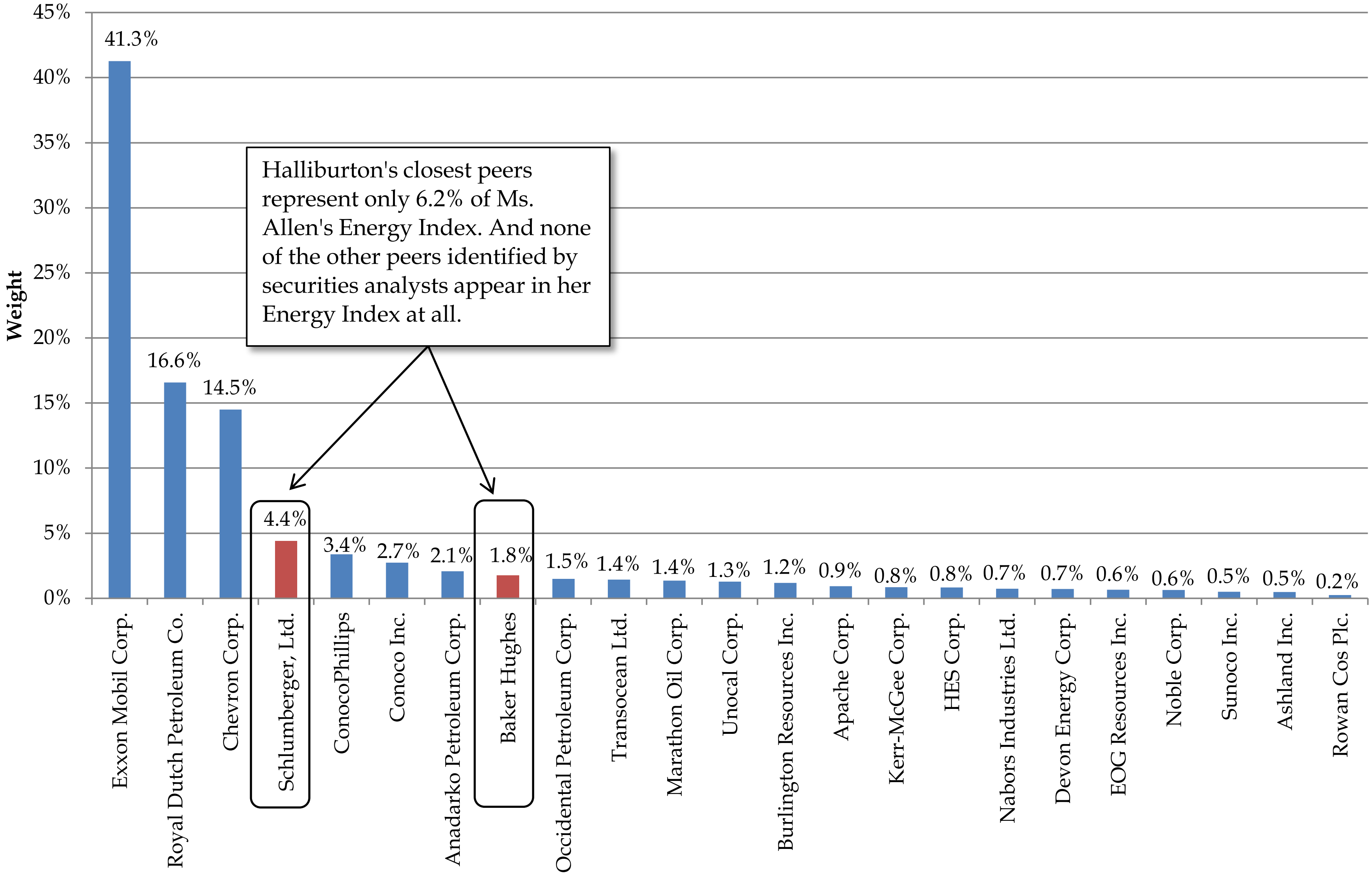
06/03/1999 - 12/06/2001



[1] This analysis relies on the universe of Halliburton analyst reports issued during the Class Period that Ms. Allen identified in her "Appendix B: Materials Considered" and "Appendix B-1: Materials Considered". A mention is only counted if a securities analyst explicitly identifies a company as being a peer or competitor to Halliburton. If a company is simply mentioned in a report but not explicitly characterized as a competitor or peer to Halliburton (e.g., listed in an industry table), then it is not counted for the purposes of this analysis. Companies with less than three explicit mentions and companies that are not publicly traded in the United States are excluded.

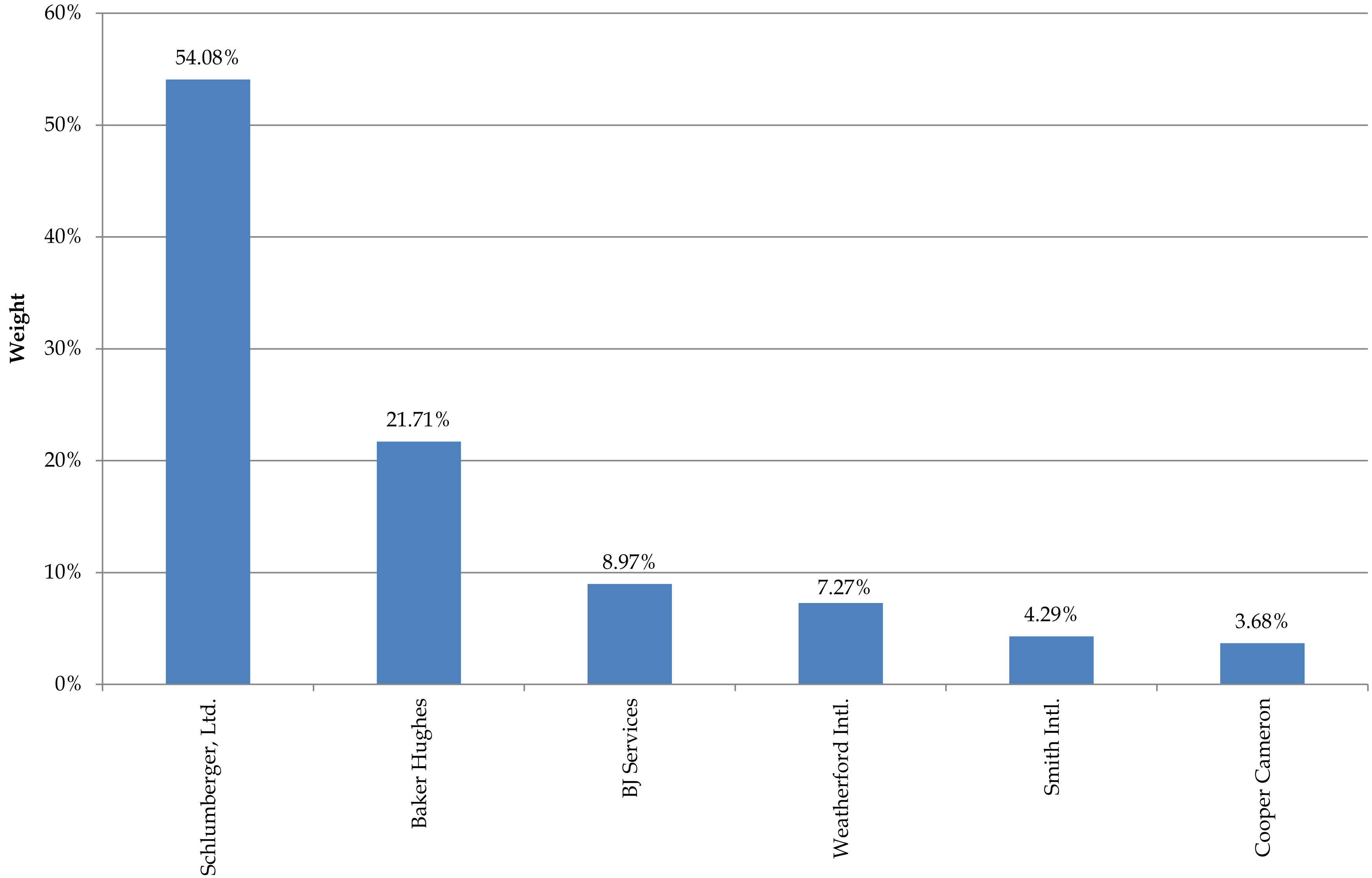
Exhibit 3a.

Weights of Companies in Ms. Allen's Energy Index (S&P 500 Energy Index)



Source: Allen Report Backup Material
Note: End of Class Period weights shown as of 12/01/2001.

Exhibit 3b.
Weights of Companies in Industry Peer Index[1]



Source: Bloomberg
[1] Weights as of 12/06/2001. Index weights vary over the Class Period. Schlumberger, Ltd. and Baker Hughes combined weight in the index never drops below 66.5%.

Exhibit 4a.
Event Study for Corrective Disclosure Events After Including Industry Peer Index

		One-Day Event Window				Two-Day Event Window			
Event Date	Alleged Corrective Disclosure Description	Excess Return	P-Value	t-stat	Statistically Significant at the 95% Confidence Level?	Excess Return	P-Value	t-stat	Statistically Significant at the 95% Confidence Level?
12/21/2000	Halliburton announced a $120 million charge which included $95 million in project costs, some of which allegedly should not have been previously booked (Complaint at ¶ 150).	-0.014	39.66%	-0.85	NO	-0.059	0.57%	-2.56	YES
6/29/2001	Halliburton disclosed that Harbison-Walker asked for asbestos claims related financial assistance from Halliburton (Complaint at ¶ 170).	-0.046	0.45%	-2.85	YES	-0.069	15.43%	-3.03	YES
8/9/2001	2Q01 10-Q included additional details regarding asbestos claims (Complaint at ¶ 178).	-0.052	0.13%	-3.23	YES	-0.085	4.65%	-3.69	YES
10/31/2001	Halliburton issued a press release announcing the Mississippi verdict (Halliburton 8-K).	-0.049	0.27%	-3.01	YES	-0.095	0.41%	-4.17	YES
12/4/2001	Halliburton announced Texas judgment and three other judgments (Complaint at ¶ 191).	-0.037	2.38%	-2.27	YES	-0.082	0.54%	-3.58	YES
12/7/2001	Halliburton announced Maryland verdict (Complaint at ¶ 191).	-0.555	0.00%	-34.27	YES	-0.373	0.00%	-16.29	YES

Using the Allen Regression including the Industry Peer Index, there is evidence of statistically significant price declines at the 95% confidence level on all six days over a two-day window.

Source: Allen Report Backup Material, Bloomberg
Note: The Allen Regression plus Industry Peer Index model estimates the relationship between Halliburton's common stock returns with the returns of the S&P 500 Energy Index (with Halliburton removed) and Ms. Allen's Fortune E&C Index, all in terms of log returns. The model is run over the Class Period with the same time period and days removed as specified in the Allen Report.

Exhibit 4b.
Comparison of Allen Event Study with Corrected Event Study (Including Industry Peer Index)

		Allen Event Study								Corrected Event Study (Including Industry Peer Index)							
		One-Day Event Window				Two-Day Event Window				One-Day Event Window				Two-Day Event Window			
Event Date	Alleged Corrective Disclosure Description	Excess Return	P-Value	t-stat	Statistically Significant at the 95% Confidence Level?	Excess Return	P-Value	t-stat	Statistically Significant at the 95% Confidence Level?	Excess Return	P-Value	t-stat	Statistically Significant at the 95% Confidence Level?	Excess Return	P-Value	t-stat	Statistically Significant at the 95% Confidence Level?
12/21/2000	Halliburton announced a $120 million charge which included $95 million in project costs, some of which allegedly should not have been previously booked (Complaint at ¶ 150).	-0.025	27.72%	-1.09	NO	-0.083	1.01%	-2.59	YES	-0.014	39.66%	-0.85	NO	-0.059	0.57%	-2.56	YES
6/29/2001	Halliburton disclosed that Harbison-Walker asked for asbestos claims related financial assistance from Halliburton (Complaint at ¶ 170).	-0.063	0.57%	-2.78	YES	-0.104	6.99%	-3.25	YES	-0.046	0.45%	-2.85	YES	-0.069	15.43%	-3.03	YES
8/9/2001	2Q01 10-Q included additional details regarding asbestos claims (Complaint at ¶ 178).	-0.047	4.07%	-2.05	YES	-0.079	16.04%	-2.44	YES	-0.052	0.13%	-3.23	YES	-0.085	4.65%	-3.69	YES
10/31/2001	Halliburton issued a press release announcing the Mississippi verdict (Halliburton 8-K).	-0.067	0.33%	-2.95	YES	-0.130	0.55%	-4.05	YES	-0.049	0.27%	-3.01	YES	-0.095	0.41%	-4.17	YES
12/4/2001	Halliburton announced Texas judgment and three other judgments (Complaint at ¶ 191).	-0.029	19.80%	-1.29	NO	-0.058	20.88%	-1.80	NO	-0.037	2.38%	-2.27	YES	-0.082	0.54%	-3.58	YES
12/7/2001	Halliburton announced Maryland verdict (Complaint at ¶ 191).	-0.570	0.00%	-25.05	YES	-0.390	0.00%	-12.13	YES	-0.555	0.00%	-34.27	YES	-0.373	0.00%	-16.29	YES

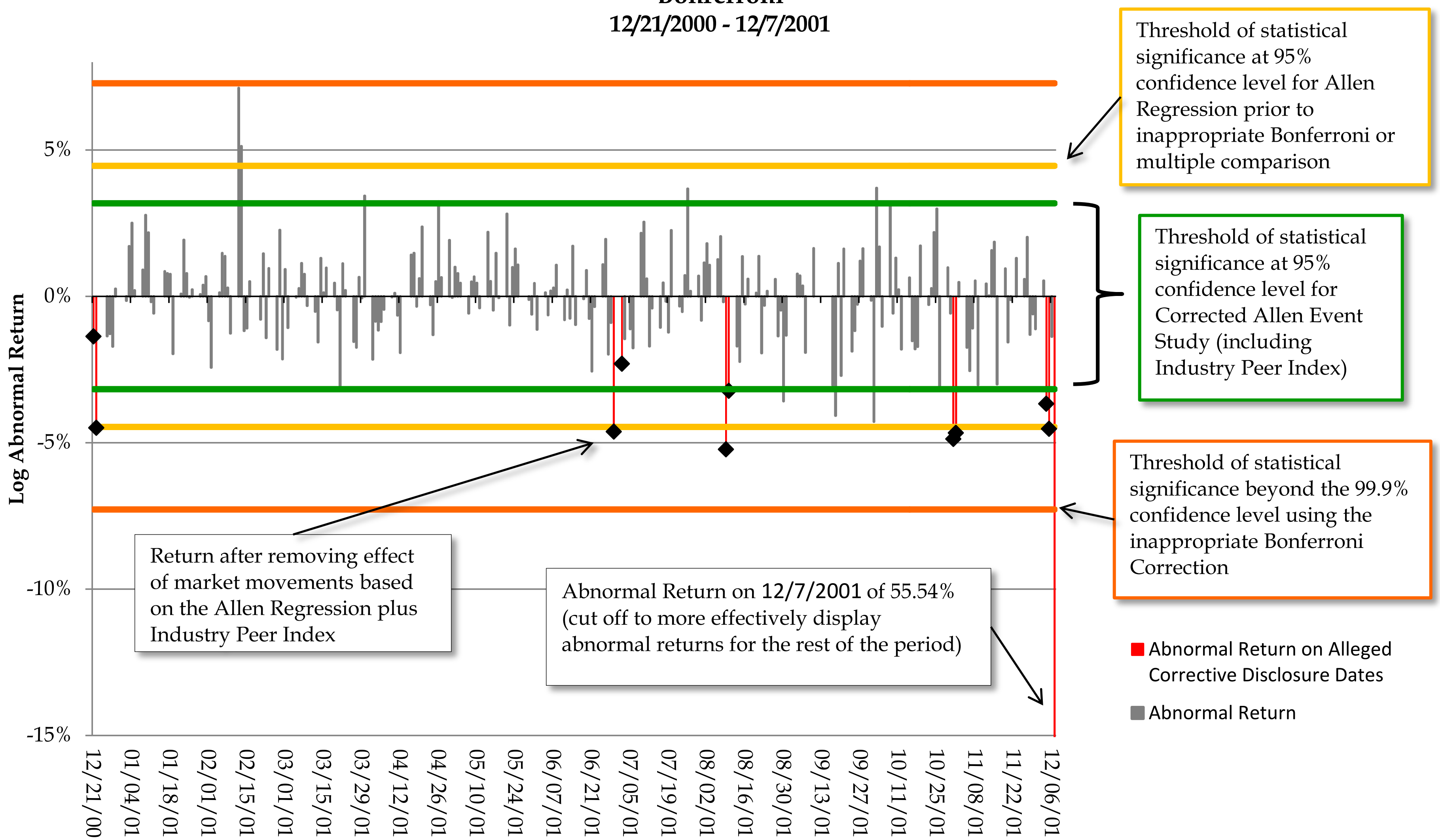
Allen Event Study	Corrected Event Study (Including Industry Peer Index)
Using the Allen Regression, there is evidence of statistically significant price declines at the 95% confidence level on five of six days over a two-day window.	Using the Allen Regression including the Industry Peer Index, there is evidence of statistically significant price declines at the 95% confidence level on all six days over a two-day window.

Source: Allen Report Backup Material, Bloomberg
Note: The Allen Regression model estimates the relationship between Halliburton's common stock returns with the returns of the S&P 500 Energy Index (with Halliburton removed) and Ms. Allen's Fortune E&C Index, all in terms of log returns. The Allen Regression plus Industry Peer model adds the Industry Peer Index to the Allen Regression. Both models are run over the Class Period with the same time period and days removed as specified in the Allen Report.

Exhibit 5.

Comparison of Statistical Significance Threshold for Corrected Allen Event Study (with Industry Peer Index), Allen Event Study Before Bonferroni Adjustment and Allen Event Study After Bonferroni

12/21/2000 - 12/7/2001



Source: Bloomberg

Note: Abnormal return plotted from Corrected Allen Event Study (Including Industry Peer Index)

Exhibit 6.
Application of Holm-Bonferroni Correction to Event Study Regression Results

P-Value Rank	Date	P-Value	Statistically Significant (Prior to Any Multiple Comparisons Correction)	Holm-Bonferroni Test Statistic	Statistically Significant
[1]	[2]	[3]	[4]	[5]	[6]
A. One-day event window					
1	12/7/2001	0.0000	YES	0.0083	YES
2	8/9/2001	0.0013	YES	0.0100	YES
3	10/31/2001	0.0027	YES	0.0125	YES
4	6/29/2001	0.0045	YES	0.0167	YES
5	12/4/2001	0.0238	YES	0.0250	YES
6	12/21/2000	0.3966	NO	0.0500	NO
B. Two-day event window					
1	12/7/2001 - 12/10/2001	0.0000	YES	0.0083	YES
2	10/31/2001 - 11/1/2001	0.0000	YES	0.0100	YES
3	8/9/2001 - 8/10/2001	0.0002	YES	0.0125	YES
4	12/4/2001 - 12/5/2001	0.0004	YES	0.0167	YES
5	6/29/2001-7/2/2001	0.0026	YES	0.0250	YES
6	12/21/2000 - 12/22/2000	0.0106	YES	0.0500	YES

Source: Bloomberg, Allen Report Backup Material

Notes:

[1] = Rank of p-value from smallest (most statistically significant) to largest

[2] = Event Window

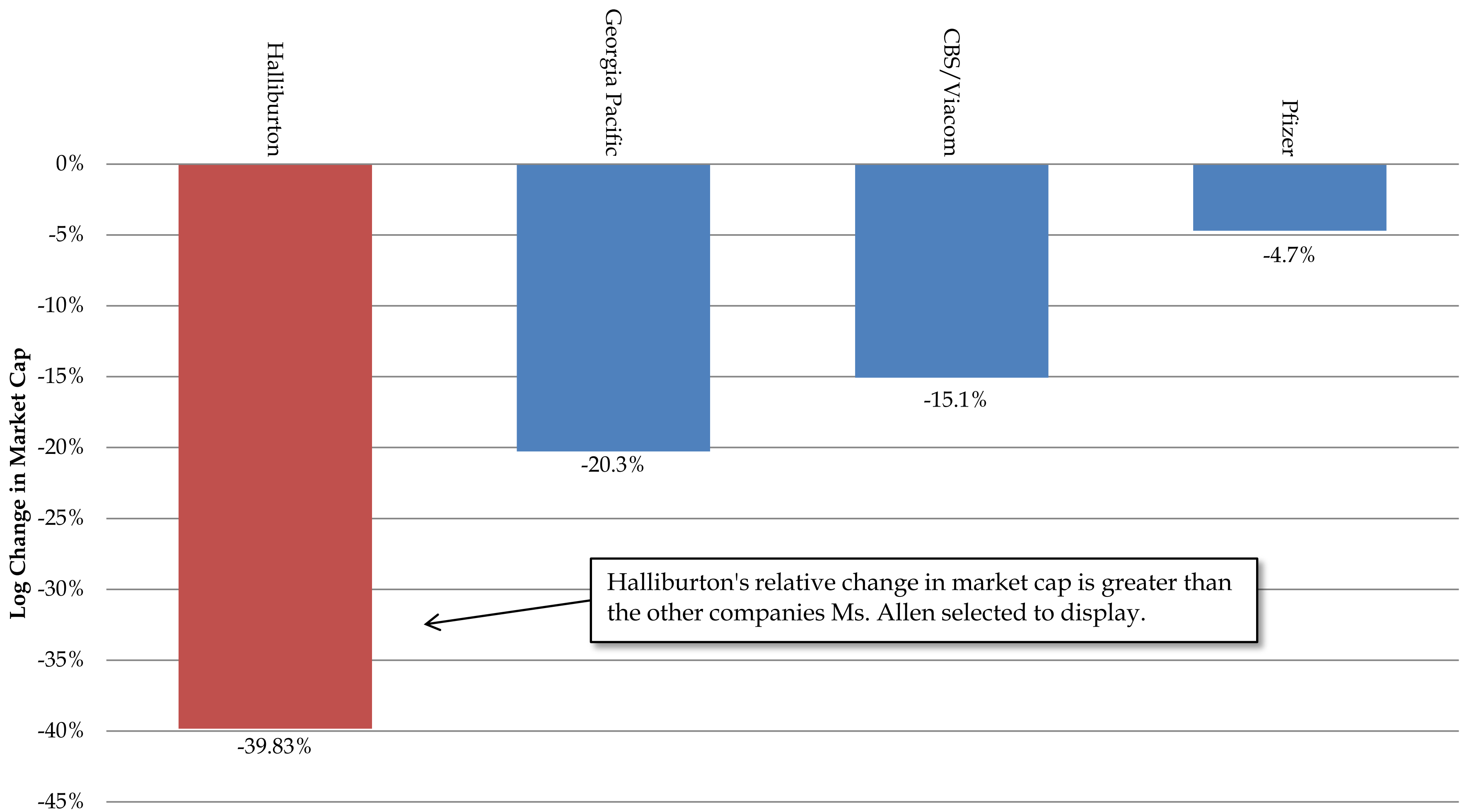
[3] = p - value from Corrected Allen Event Study (including Industry Peer Index)

[4] = YES if [3] less than or equal to .05

[5] = Holm-Bonferroni statistic, calculated as .05 / 7-[1]

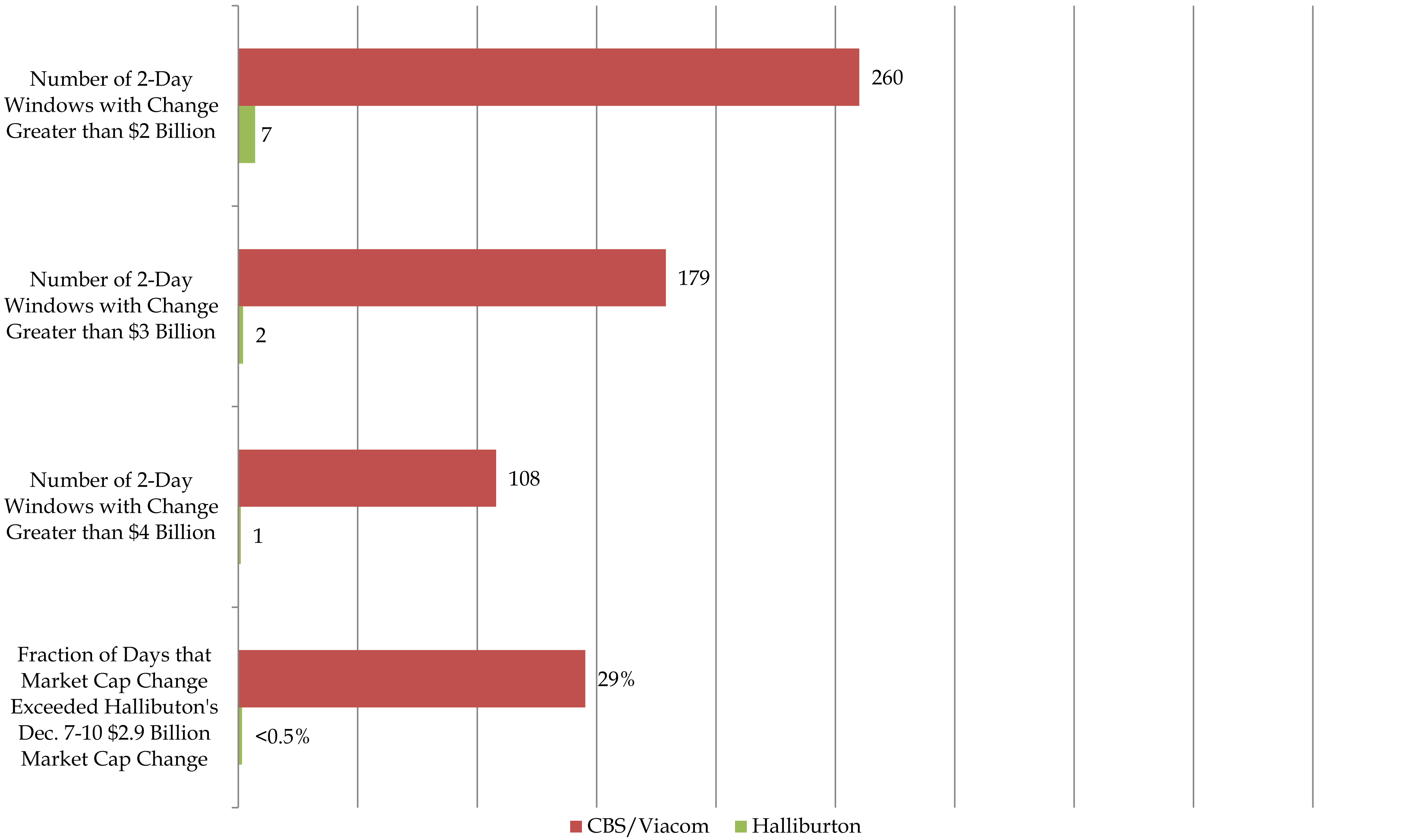
[6] = YES if [3] less than or equal to [5]

Exhibit 7.
Two-Day Log Change in Market Capitalization for December 7, 2001 Alleged Corrective Disclosure Event for Halliburton and Specific Asbestos Index Companies Shown in the Allen Report



Source: Bloomberg, Allen Report Backup Material
Note: To be clear, the correct comparison here would be abnormal price movement, not raw relative changes; however, for direct comparison to Ms. Allen's Report, my criticism focuses on raw relative change in market cap.

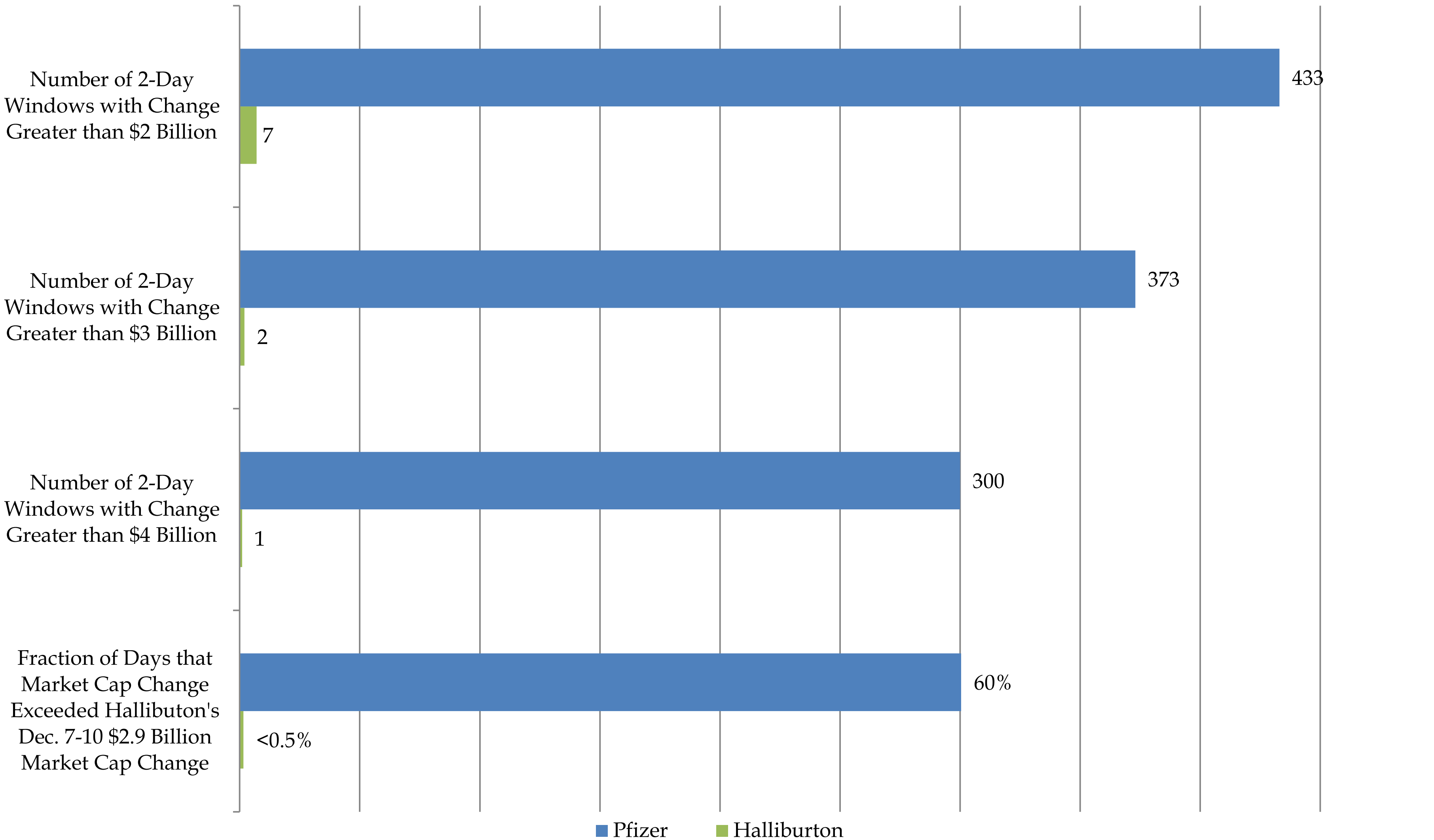
Exhibit 8a.
Comparing 2-Day Raw Dollar Market Capitalization Changes
Halliburton and CBS/Viacom



Source: Allen Report Backup Material

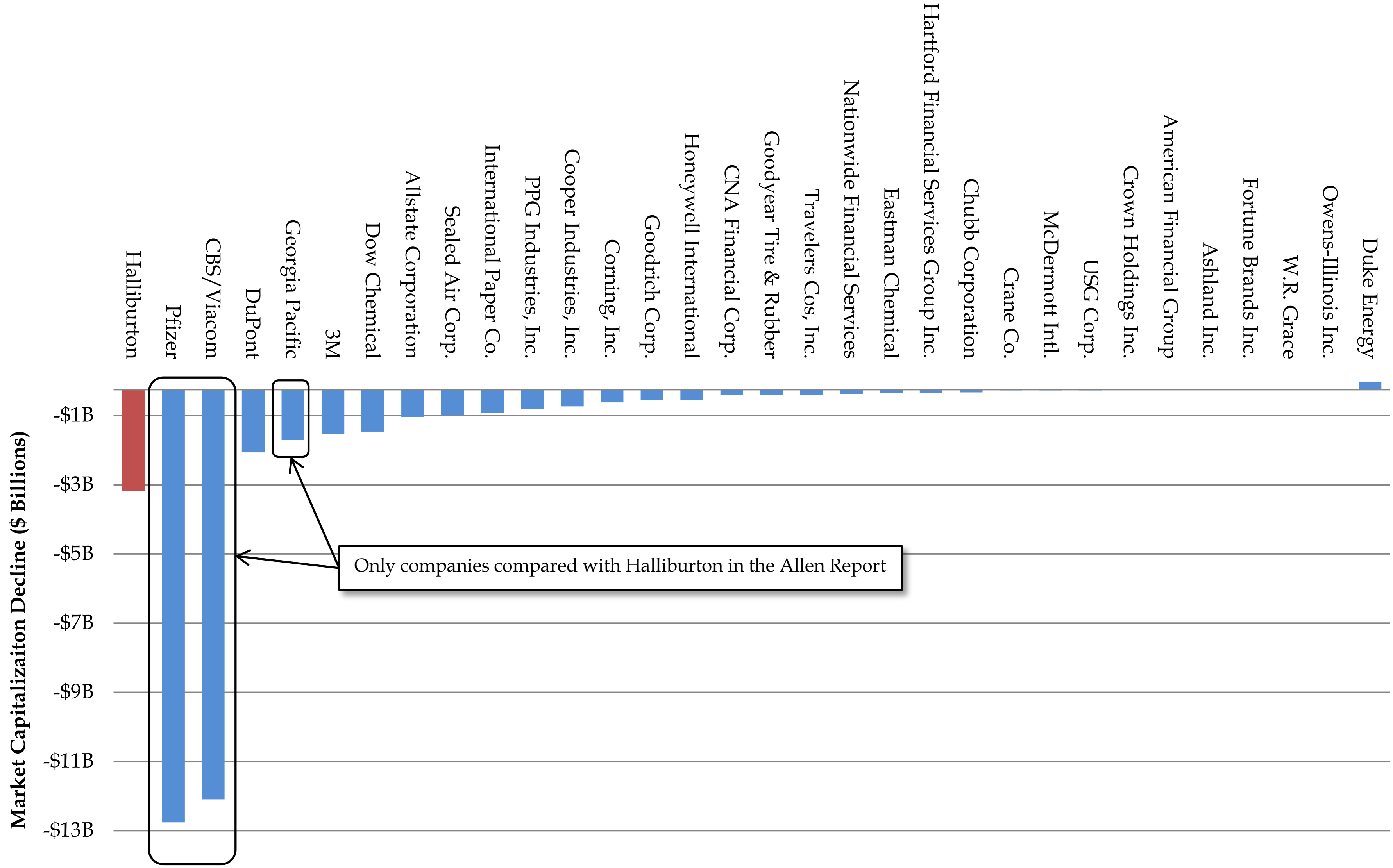
Exhibit 8b.

Comparing 2-Day Raw Dollar Market Capitalization Changes
Halliburton and Pfizer



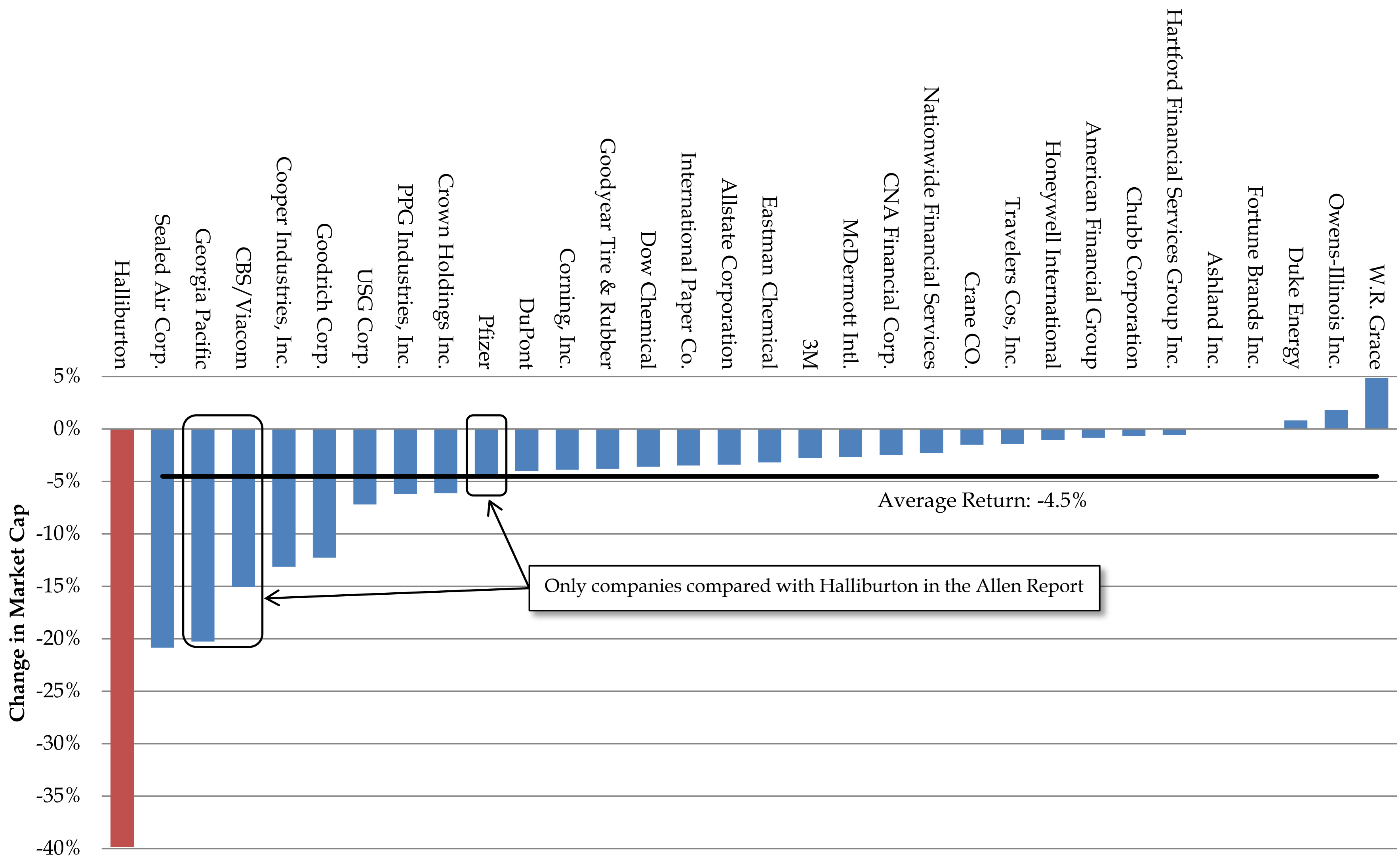
Source: Allen Report Backup Material

Exhibit 9a.
Two-Day Dollar Change in Market Capitalization for December 7, 2001 Alleged Corrective Disclosure Event for Halliburton and Asbestos Index Companies



Source: Bloomberg, Allen Report Backup Material

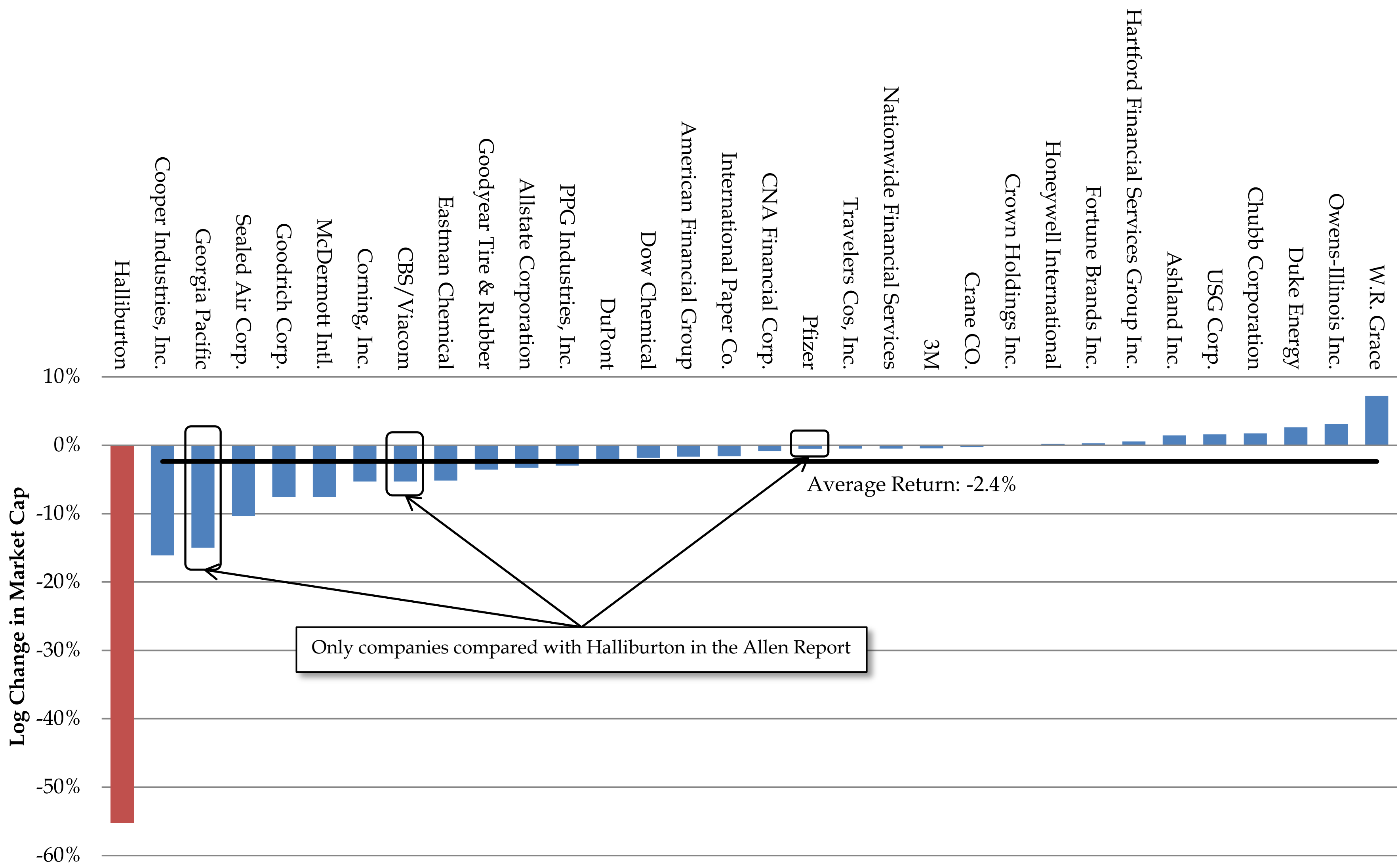
Exhibit 9b.
Two Day Percentage Change in Market Capitalization Post December 7, 2001
for Halliburton and Asbestos Index Companies



Source: Bloomberg, Allen Report Backup Material
Note: These figures are log changes; however, I quote them as percentages for ease of exposition.

Exhibit 10.

One-Day Log Change in Market Capitalization for December 7, 2001 Alleged Corrective Disclosure Event for Halliburton and Asbestos Index Companies



Source: Bloomberg, Allen Report Backup Material

Exhibit 11.
Disaggregation of Change in Asbestos Climate from Halliburton-Specific Price Movement
Based on Statistical Models in Allen Report

		December 7, 2001	December 7, 2001 and December 10, 2001 Combined
[1]	Observed Halliburton Return	-55.2%	-39.8%
[2]	Halliburton Return After Controlling for Market and Industry Effects using Allen Event Study	-57.0%	-39.0%
[3]	Return of Allen "Asbestos Index"	-2.3%	-4.3%
[4]	Coefficient of Asbestos Index in Allen Regression	0.92	0.92
[5]	Effect of Return on Asbestos Index	-2.1%	-4.0%
[6]	Halliburton Return After Controlling for Market, Industry, AND Asbestos Index Effects	-54.9%	-35.0%
[7]	Root Mean Squared Error	3.3%	4.6%
[8]	T-statistic for Halliburton Return after controlling for Asbestos Index	-16.9	-7.6
[9]	Statistically significant at 95% confidence level after controlling for Asbestos Index?	YES	YES
[10]	Percent of Halliburton Abnormal Return not Explained by Asbestos Index	96.3%	89.8%

Sources and Notes:

[1] Lucy Allen Exhibit 1a, Lucy Allen Backup Material - "9.xls"

[2] Lucy Allen Exhibit 1a, Lucy Allen Backup Material - "9.xls"

[3] Lucy Allen Backup Material - "9.xls"

[4] Lucy Allen Exhibit 2b, Lucy Allen Backup Material - "9.xls"

[5] [3] * [4]

[6] [2] - [5], this relies upon applying the industry control coefficients from during the class period, the result is not substantively different if the post-class period coefficients are used.

[7] Lucy Allen Exhibit 2b, Lucy Allen Backup Material - "9.xls", for 2-trading day window including December 10, the RMSE is the one-day RMSE is multiplied by square root of 2, this also conservatively uses the RMSE from the post-class period regression, the results are not substantively different if I were to use the class period RMSE

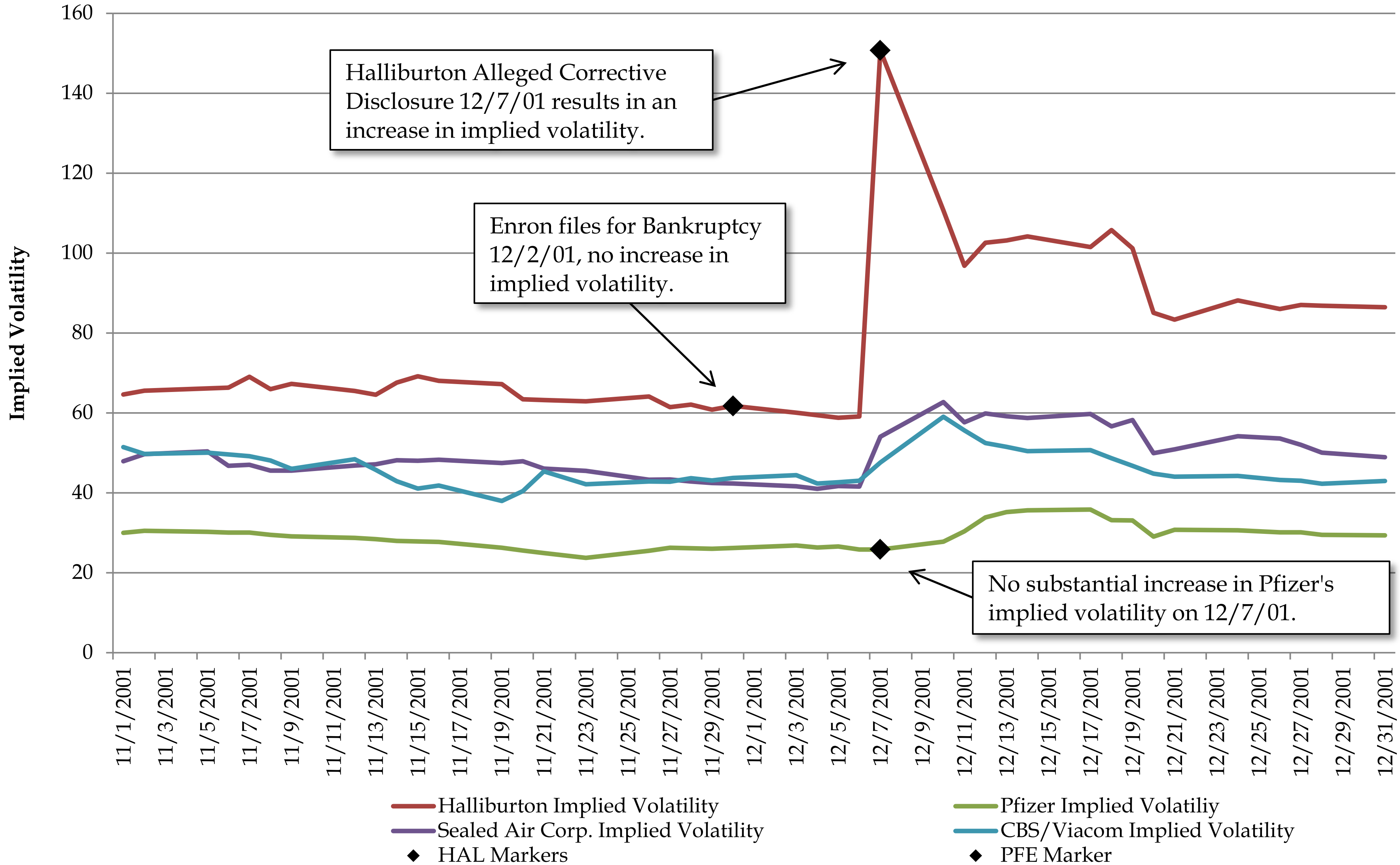
[8] [6] / [8]

[9] The results are significant at well above the 99% confidence level. A t-statistic over 7.00 implies confidence at a greater than 99.999999999% level

[10] [6] / [2]

Exhibit 12.

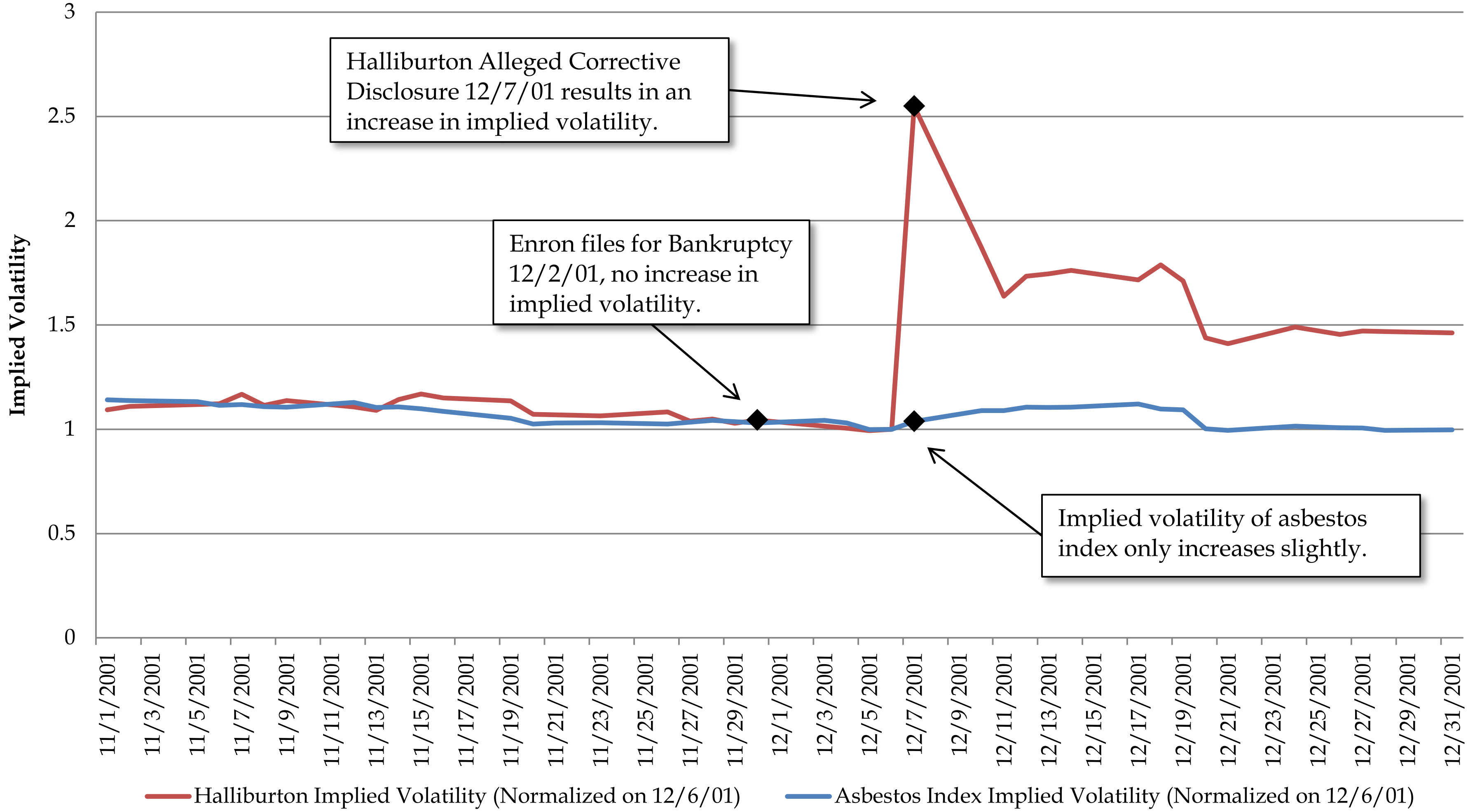
Implied Volatility for Halliburton and Selected Companies Displayed in Allen Report



Source: Bloomberg

Exhibit 13.

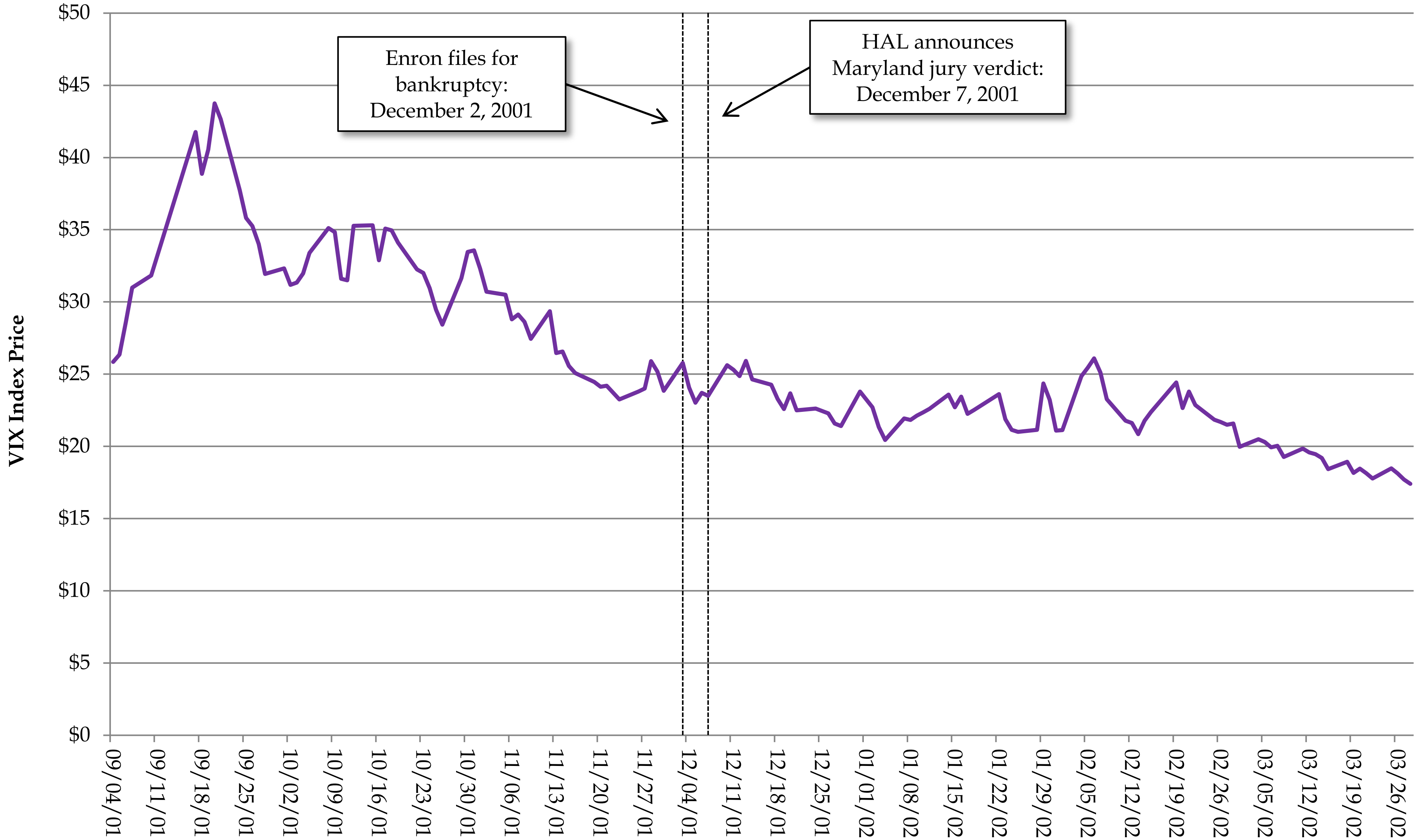
Comparison of Halliburton Implied Volatility with Implied Volatility of Entire "Asbestos Index" (Normalized to 1 on 12/6/01)



Source: Bloomberg

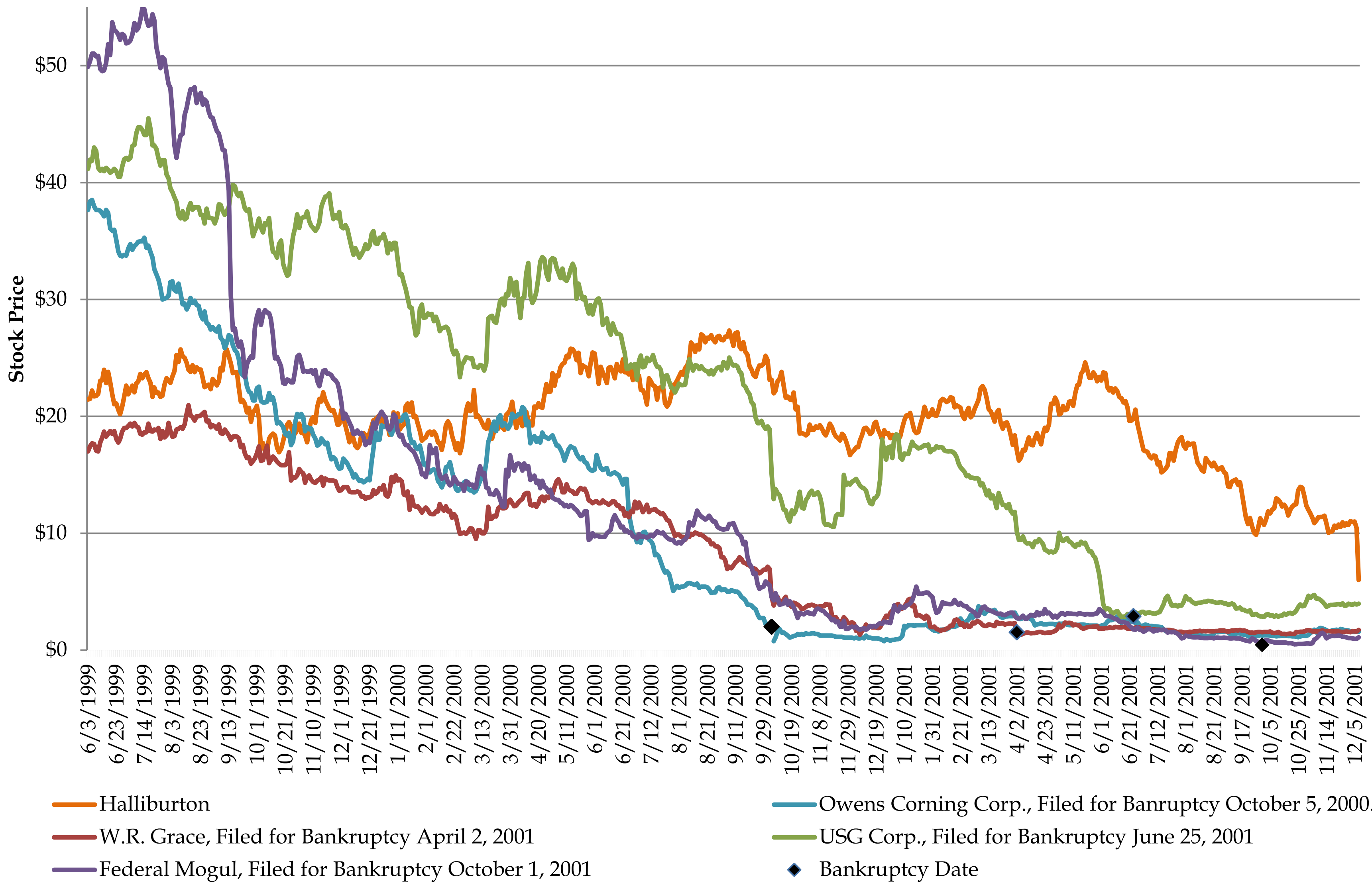
Note: Using the same Implied Volatility series from Bloomberg as Ms. Allen, each company's implied volatility is indexed to 1 as of December 6, 2001. Because the asbestos index is an equally weighted index, the simple average of all the companies' implied volatilities is calculated as the Asbestos Index Implied Volatility for each day. Implied volatility data were unavailable for 6 of the 31 companies in Ms. Allen's Asbestos Index: Cooper Industries, Inc., Crane Co., Georgia Pacific, Goodrich Corp., Nationwide Financial Services, and W.R. Grace.

Exhibit 14.
VIX Index Price
9/4/2001 - 3/28/2002



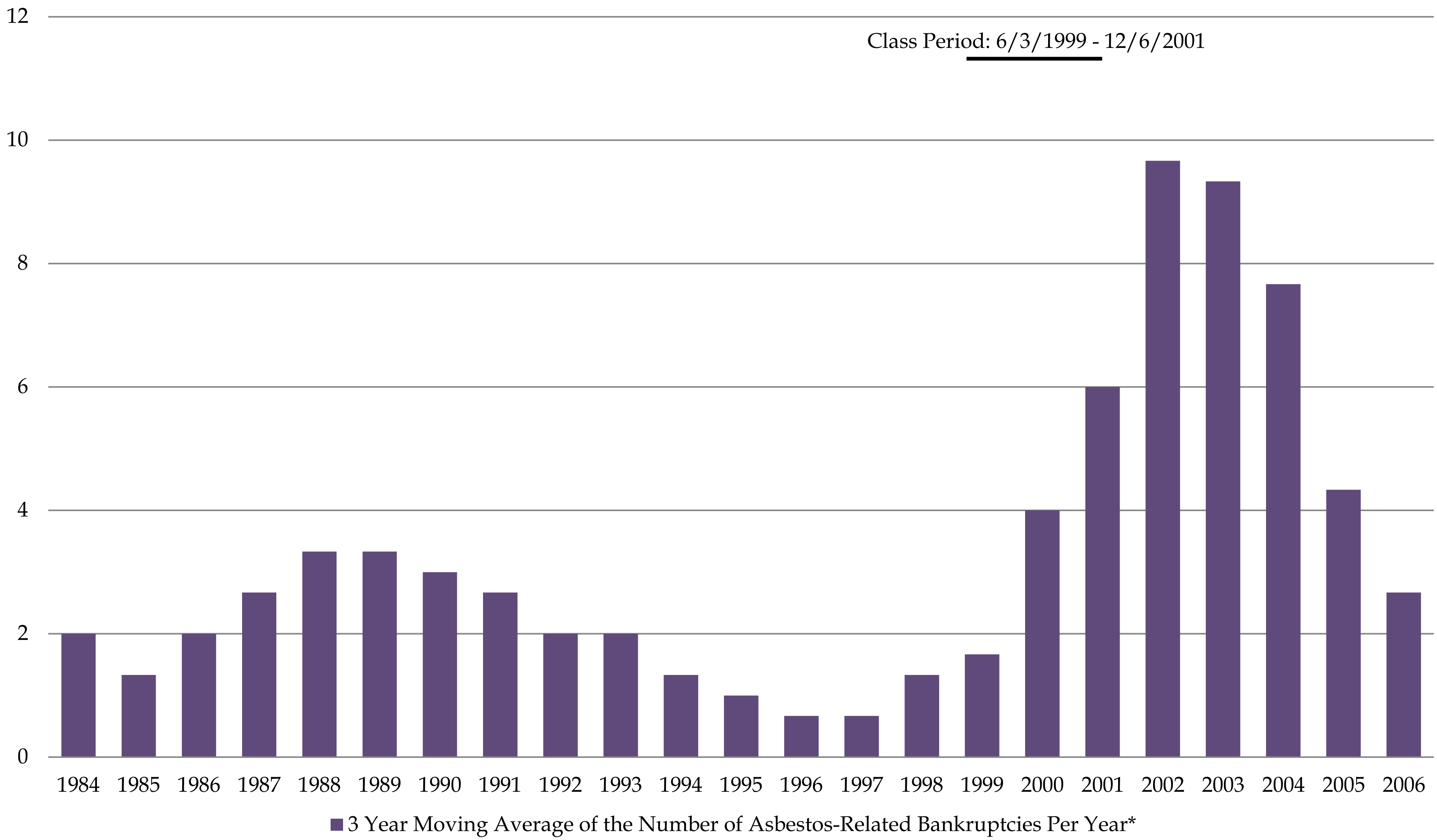
Source: CBOE
Note: The VIX price is based on a range of options on the S&P 500 index. It rises and falls based on the expected movement in the S&P 500 Index over the next 30 days.

Exhibit 15.
Halliburton and Stock Prices of Firms with Large Asbestos Litigation that Filed for Bankruptcy During the Class Period



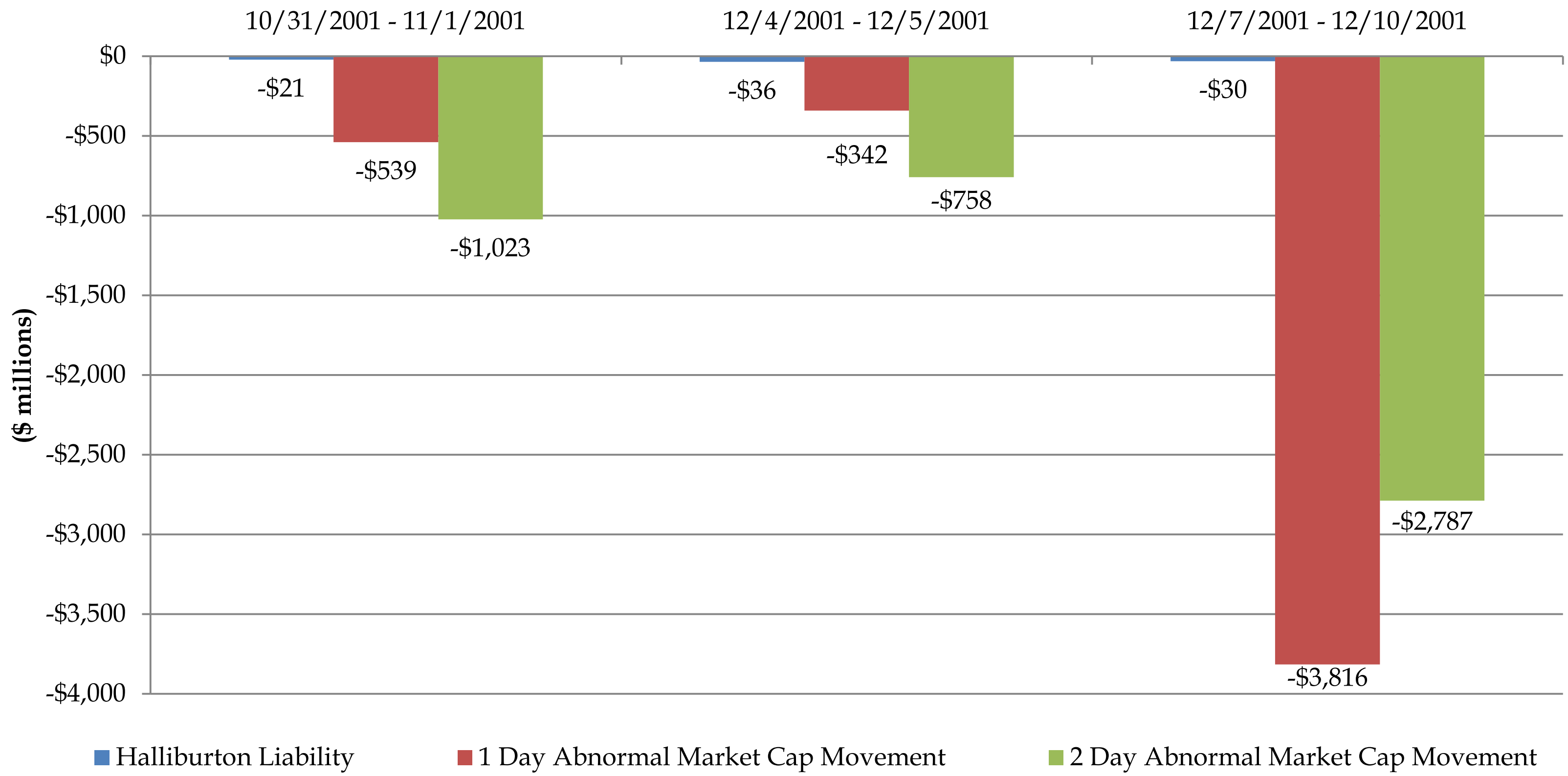
Source: Bloomberg

Exhibit 16.
Moving Average of Asbestos-Related Bankruptcies Per Year, 1984 - 2006



Source: American Academy of Actuaries' Mass Torts Subcommittee, *Overview of Asbestos Claims Issues and Trends*, August 2007.
Note: * This figure represents the average number of asbestos-related bankruptcies over the current year and the two previous years (e.g. the figure for 2001 is the average over 1999-2001).

Exhibit 17.
Abnormal Market Cap Decline Compared to Adverse Litigation Decisions



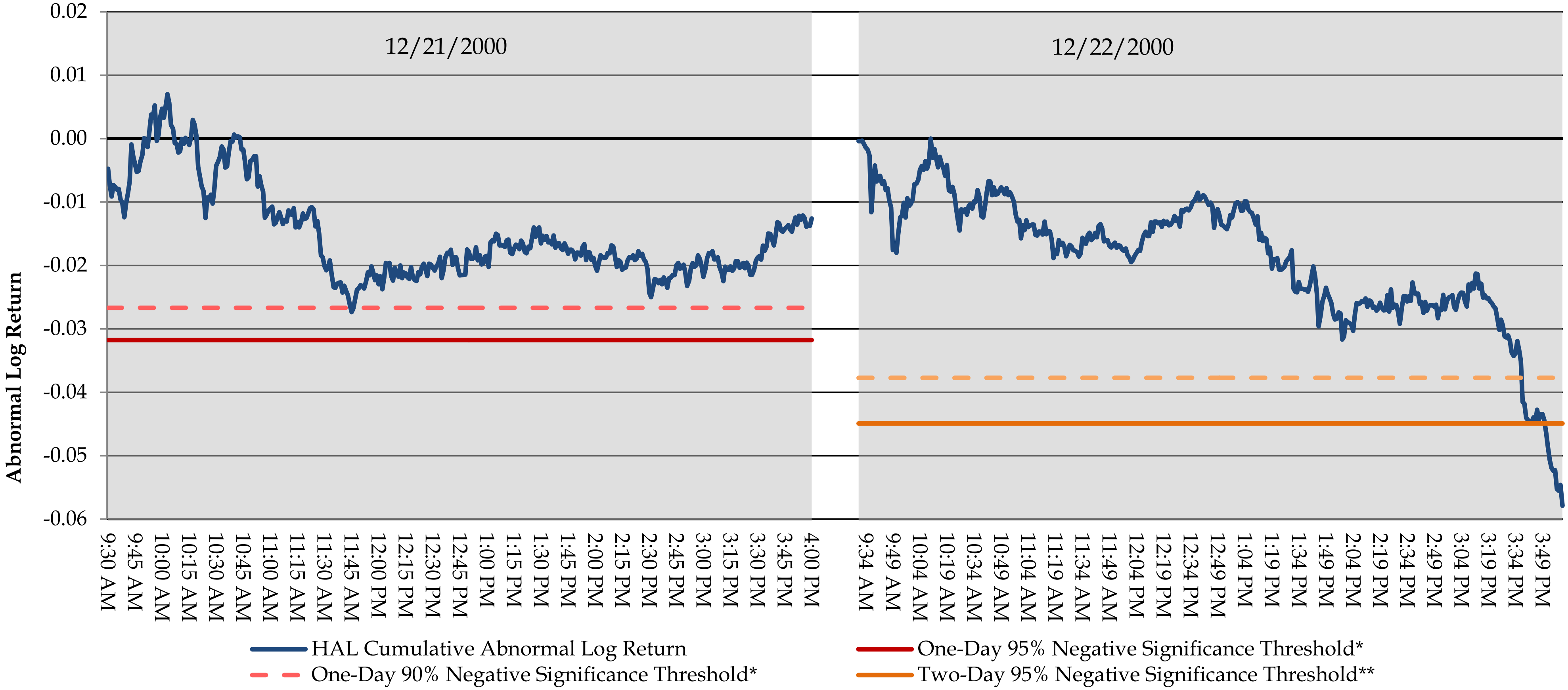
Sources:

11/7/2001 Halliburton SEC Form 8-K, p. 2. "On October 30, 2001 registrant issued a press release entitled 'Halliburton Disputes Asbestos Claims' pertaining, among other things, to an announcement that a jury in Holmes County, Mississippi rendered a verdict against three companies in an asbestos case in favor of six plaintiffs for a total of $150 million. Registrant's subsidiary, Dresser Industries, Inc., was a defendant in two of the claims. Registrant's share of the verdict is $21.25 million."

12/4/2001 Halliburton SEC Form 8-K, pp. 2-3. "Halliburton Company announced that on November 29, 2001, a Texas district court in Orange, Texas entered a judgment against its subsidiary, Dresser Industries, Inc., on a $65 million jury verdict rendered in September 2001 in favor of five plaintiffs following a trial of several weeks…. The same district court also entered three additional judgments against Dresser in the aggregate amount of $35.7 million in favor of 100 other asbestos plaintiffs."

12/7/2001 Halliburton SEC From 8-K, p. 1. "Halliburton Company announces that on December 5, 2001, a jury in Baltimore, Maryland returned verdicts against its subsidiary, Dresser Industries, Inc., and other defendants following a trial of several weeks involving asbestos claims. Each of five plaintiffs alleged exposure to Harbison-Walker Refractories products. Dresser's portion of the verdicts totals $30 million."

Exhibit 18.
Halliburton Intraday Cumulative Abnormal Log Return
Following Release of Corrective Information on December 21, 2000



Sources: TICK data, Bloomberg & Allen Report Backup Material Excel file "S5ENRS Index Weights"

Notes: Price is calculated as the volume weighted average price for each minute of the trading day except for the opening and closing prices which are the unadjusted reported prices from Bloomberg. Halliburton's intraday expected return is calculated based on the intercept and coefficient values from Allen Regression with the Industry Peer Index, using intraday indices constructed using index constituent companies' previous-close-to-current-minute returns. Stone & Webster was not included in the intraday Fortune E&C Index as intraday data is not available for the company after its May 2000 bankruptcy and delisting from the NYSE.

* The One-Day Significance Thresholds at the 95% and 90% levels are calculated by multiplying the RMSE from the Allen Regression with the IndustryPeer Index by -1.96 or -1.645, respectively.

** The Two-Day Significance Thresholds at the 95% and 90% levels are calculated by multiplying the cumulative RMSE over 12/21/00-12/22/00 from the Allen Regression with the Industry Peer Index by -1.96 or -1.645, respectively.

APPENDIX A

Documents Considered

Court Documents

- Fourth Consolidated Amended Complaint for Violation of the Securities Exchange Act of 1934 dated April 4, 2006.
- Defendants' Brief on Price Impact Demonstrating That Class Certification Must Be Denied, dated September 10, 2014 (including all exhibits)

Court Decisions

- November 4, 2008 Memorandum Opinion and Order
- *Erica P. John Fund, Inc. v. Halliburton Co.,* 563 U. S. ___(2011)
- January 27, 2012 Order
- *Erica P. John Fund, Inc. v. Halliburton Co.,* 573 U. S. ___(2014)
- *Basic Inc. v. Levinson*, 485 U.S. 224.
- *S.E.C. v. Morris*, Not Reported in F. Supp.2d(2007), 207 WL 614210

Expert Reports

- Expert Report of Lucy P. Allen, filed November 16, 2007, including all documents considered in Allen Report Appendix B and Appendix B-1 and the Allen Report Backup Material
- Supplemental Expert Report of Lucy P. Allen filed January 18, 2008
- Expert Report of Lucy P. Allen, filed September 10, 2014, including all backup materials received and all documents referenced therein.
- Report of Jane D. Nettesheim filed September 17, 2007
- Rebuttal Report of Jane D. Nettesheim filed December 20, 2007
- Expert Report of Lawrence F. Ranallo filed December 16, 2005 in *Securities and Exchange Commission v Gary V. Morris.*
- Supplemental Expert Report of Richard G. Stevens filed May 26, 2006 in *Securities and Exchange Commission v Gary V. Morris.*

Depositions

- Deposition of Lucy Allen, September 22, 2014.
- Deposition of Lucy Allen, December 3, 2007.

- Deposition of Jane Nettesheim, October 16, 2007.
- Deposition of Lawrence F. Ranallo, June 7, 2006
- Deposition of Richard G. Stevens, March 28, 2006

Security Data

- All data received in Allen Report Backup Material
- VIX data from CBOE
- Implied volatility data from Bloomberg
- Security prices from Bloomberg
- Bloomberg Peer function
- SIC codes from SEC.gov
- Intraday security data from TICK

SEC Filings/Forms

- All Annual Reports and SEC filings listed in Allen Report Appendix B
- Halliburton SEC Form 8-Ks from June 6, 1999 through May 29, 2002
- Halliburton SEC Form 10-Qs for 1998 Q1 through 2002 Q3
- Halliburton SEC Form 10-Ks for FY 1998-2002
- Exxon FY 2001 SEC Form 10-K filed March 27, 2002
- Baker Hughes FY 2001 SEC Form 10-K filed March 13, 2002
- BJ Services FY 2001 SEC Form 10-K filed December 18, 2001
- Coflexip FY 2001 Annual Report
- Cooper Cameron FY 2001 SEC Form 10-K filed March 26, 2002
- Fluor FY 2001 SEC Form 10-K filed March 21, 2002
- Foster Wheeler FY 2001 SEC Form 10-K filed April 12, 2002
- McDermott International FY 2001 SEC Form 10-K filed March 27, 2002
- Oceaneering International FY 2001 SEC Form 10-K filed March 27, 2002
- Schlumberger, Ltd. FY 2001 SEC Form 10-K filed February 28, 2002
- Smith International FY 2001 SEC Form 10-K filed March 20, 2002
- Stolt Comex Seaway 2001 Annual Report
- Weatherford International FY 2001 SEC Form 10-K filed March 25, 2002

Conference Calls

- All Conference Call transcripts listed in Allen Report Appendix B

News and Press Releases

- All News Articles and Press Releases listed in Allen Report Appendix B
- "Halliburton Stock Down as Asbestos Liability Rises," *Reuters News*, August 9, 2001 19:12
- "Dallas-Based Oil Services Firm Halliburton to Take $120 Million Charge," *MCT Business News*, December 22, 2000,
- http://www.trustservices.org/our-trusts/swan-asbestos
- http://resasb.org/RFC_TR_History.aspx
- http://bankrupt.com/harnischfeger.txt
- http://www.history.com/this-day-in-history/enron-files-for-bankruptcy

Analyst Reports

- All Analyst and Industry reports obtained from Allen Report Backup Materials listed in Allen Report Appendix B and Appendix B-1
- Analyst reports supplied by Thomson Reuters Investext June 1999 through November 2002 including but not limited to:
  - "HALLIBURTON CO.," STEPHENS INC., June, 03, 1999.
  - "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, June, 07, 1999.
  - "HALLIBURTON CO. (HOLDING CO.) - HISTORY & DEBT," MERGENT FIS - HISTORY & DEBT, June, 12, 1999.
  - "HAL: REDUCING SECOND QUARTER EARNINGS ESTIMATE," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), June, 15, 1999.
  - "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, June, 27, 1999.
  - "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., July, 23, 1999.
  - "HALLIBURTON CO.," SUN TRUST ROBINSON HUMPHREY CAPITAL MARKETS, July, 23, 1999.
  - "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., July, 23, 1999.
  - "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), July, 23, 1999.
  - "HALLIBURTON: Q2 IN LINE; MODESTLY LOWERING Q4 AND…," DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, July, 23, 1999.
  - "HAL: HALLIBURTON 2Q, COMPLEX BUT IN LINE," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), July, 23, 1999.
  - "AM CALL: HAL: 2Q99 AHEAD OF EXPECTATIONS FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, July, 23, 1999.
  - "HALLIBURTON CO.," MORGAN STANLEY, July, 23, 1999.

- "HALLIBURTON CO.," PRUDENTIAL EQUITY GROUP, INC., July, 28, 1999.
- "HALLIBURTON CO.," SUN TRUST ROBINSON HUMPHREY CAPITAL MARKETS, July, 30, 1999.
- "HALLIBURTON: HAL RECEIVES OFFER TO BUY OUT JV...," DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, August, 13, 1999.
- "AM CALL: HAL: HALLIBURTON & INGERSOLL-RAND TO UNWIND...," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, August, 13, 1999.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, August, 16, 1999.
- "HAL: RAISING 12-MONTH PRICE TARGET TO $57," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), August, 16, 1999.
- "HALLIBURTON CO.," SOUTHWEST SECURITIES, August, 19, 1999.
- "HALLIBURTON CO.," SMITH BARNEY CITIGROUP (US RESEARCH), August, 23, 1999.
- "HALLIBURTON CO.," MORGAN STANLEY, August, 25, 1999.
- "HALLIBURTON CO.: INITIATING COVERAGE," BROWN BROTHERS HARRIMAN & CO., September, 03, 1999.
- "HALLIBURTON CO.," MORGAN STANLEY, September, 09, 1999.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), September, 14, 1999.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, September, 18, 1999.
- "HALLIBURTON CO. (HOLDING CO.) - HISTORY & DEBT," MERGENT FIS - HISTORY & DEBT, September, 18, 1999.
- "HALLIBURTON CO.," UBS (US), September, 23, 1999.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, September, 23, 1999.
- "HALLIBURTON CO.," STEPHENS INC., October, 01, 1999.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., October, 05, 1999.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), October, 05, 1999.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., October, 05, 1999.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, October, 06, 1999.
- "HAL: THE BLOOM IS OFF THE ROSE - UPGRADING TO BUY FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, October, 06, 1999.
- "HALLIBURTON CO.," WELLS FARGO SECURITIES, LLC, October, 11, 1999.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, October, 16, 1999.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), October, 22, 1999.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, October, 22, 1999.

- "AM CALL: HAL: 3Q99 IN LINE WITH EXPECTATIONS FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, October, 22, 1999.
- "HALLIBURTON: Q3 RESULTS SLIGHTLY EXCEED EXPECTATIONS;...," DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, October, 22, 1999.
- "HAL: 3Q EPS SLIGHTLY ABOVE ESTIMATE PART 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), October, 22, 1999.
- "HAL: 3Q EPS SLIGHTLY ABOVE ESTIMATE PART 1," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), October, 22, 1999.
- "HALLIBURTON CO.," MORGAN STANLEY, October, 22, 1999.
- "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., October, 22, 1999.
- "HALLIBURTON CO.," BROWN BROTHERS HARRIMAN & CO., October, 28, 1999.
- "HALLIBURTON CO.," STEPHENS INC., November, 01, 1999.
- "HALLIBURTON CO.," SMITH BARNEY CITIGROUP (US RESEARCH), November, 10, 1999.
- "HALLIBURTON CO.," SUN TRUST ROBINSON HUMPHREY CAPITAL MARKETS, November, 18, 1999.
- "HALLIBURTON CO.," PRUDENTIAL EQUITY GROUP, INC., November, 22, 1999.
- "HALLIBURTON CO.," MORGAN STANLEY, December, 09, 1999.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, December, 11, 1999.
- "HAL: TRIMMING ESTIMATES, BRES MAIN REASON FOR DECLINE," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), December, 16, 1999.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), January, 03, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), January, 24, 2000.
- "HALLIBURTON CO.," BEAR, STEARNS & CO., INC., January, 24, 2000.
- "HALLIBURTON CO.," MORGAN STANLEY, January, 26, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), January, 28, 2000.
- "AM CALL: HAL: Q499 AHEAD IF EXPECTATIONS FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, January, 28, 2000.
- "HAL: LOWERING EARNINGS ON MORE SUBDUED OUTLOOK PART 1," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), January, 28, 2000.
- "HAL: LOWERING EARNINGS ON MORE SUBDUED OUTLOOK PART 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), January, 28, 2000.
- "HALLIBURTON CO.," MORGAN STANLEY, January, 28, 2000.
- "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., January, 28, 2000.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, January, 29, 2000.

- "HALLIBURTON CO. (HOLDING CO.) - HISTORY & DEBT," MERGENT FIS - HISTORY & DEBT, February, 02, 2000.
- "HALLIBURTON CO.," ING FINANCIAL MARKETS HISTORY USA, February, 10, 2000.
- "GEOPHYSICAL MICRO-GEOPHYSICAL /LANDMARK GRAPHICS CANADA [BRIEF," THOMSON FINANCIAL SECURITIES DATA - M&A, February, 12, 2000.
- "HALLIBURTON CO.," STEPHENS INC., February, 16, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), March, 08, 2000.
- "HAL: RAISING OUR PRICE TARGET TO $65," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), March, 08, 2000.
- "HALLIBURTON CO.," MORGAN STANLEY, March, 10, 2000.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, March, 13, 2000.
- "BAKER HUGHES/HALLIBURTON/SCHLUMBERGER LTD.," UBS (US), March, 15, 2000.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., March, 24, 2000.
- "HALLIBURTON CO.: INITIATING COVERAGE," JEFFERIES & COMPANY, INC., March, 24, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), March, 31, 2000.
- "HALLIBURTON: LOWERING Q1 EST. FOR WEAK OILFIELD RECOVERY," DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, April, 05, 2000.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, April, 27, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), April, 27, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), April, 27, 2000.
- "HALLIBURTON: Q1 CONTINUING OPERATIONS RESULTS IN LINE," DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, April, 27, 2000.
- "HAL: SELLING DRESSER EQUIPMENT GROUP, MAJOR STOCK...," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), April, 27, 2000.
- "AM CALL: MWR: HAL: Q100 IN-LINE WITH ESTIMATES FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, April, 27, 2000.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., April, 27, 2000.
- "HALLIBURTON CO.," PRUDENTIAL EQUITY GROUP, INC., May, 03, 2000.
- "HALLIBURTON CO.," CITI, May, 03, 2000.
- "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., May, 04, 2000.
- "HALLIBURTON: RAISING 2001 ESTS. AND TARGET PRICE...," DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, May, 22, 2000.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., May, 30, 2000.

- “HALLIBURTON CO. (HOLDING CO.),” MERGENT, INC. - COMPANY REPORT, June, 08, 2000.
- “HALLIBURTON: TWEAKING Q2 ESTS. AFTER CONVERSATION...,” DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, June, 09, 2000.
- “HALLIBURTON CO. (HOLDING CO.) - HISTORY & DEBT,” MERGENT FIS - HISTORY & DEBT, June, 13, 2000.
- “HALLIBURTON CO. (HOLDING CO.),” MERGENT, INC. - COMPANY REPORT, June, 15, 2000.
- “HAL: 2Q PREVIEW; PUBLISHING ESTIMATES EXCLUDING...,” SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), June, 28, 2000.
- “HALLIBURTON CO.,” CITI, June, 28, 2000.
- “HALLIBURTON CO. (HOLDING CO.),” MERGENT, INC. - COMPANY REPORT, July, 06, 2000.
- “HALLIBURTON: UPGRADING HAL TO BUY AFTER RECENT...,” DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, July, 11, 2000.
- “HALLIBURTON: CHENEY VICE-PRESIDENTIAL SPECULATION OF...,” DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, July, 24, 2000.
- “HALLIBURTON CO.,” JEFFERIES & COMPANY, INC., July, 24, 2000.
- “HALLIBURTON CO.,” ARGUS RESEARCH CORPORATION, July, 26, 2000.
- “HALLIBURTON CO.,” PAINEWEBBER INC., July, 26, 2000.
- “HALLIBURTON CO.,” JEFFERIES & COMPANY, INC., July, 26, 2000.
- “HALLIBURTON CO.,” CITI, July, 26, 2000.
- “HALLIBURTON CO.,” ING FINANCIAL MARKETS HISTORY USA, July, 27, 2000.
- “HAL: STRONG ENERGY SERVICES MARGINS... PART 1 OF 2,” SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), July, 27, 2000.
- “HAL: STRONG ENERGY SERVICES MARGINS... PART 2 OF 2,” SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), July, 27, 2000.
- “HAL: MWR: Q200 SLIGHTLY AHEAD OF EXPECTATIONS FBC,” CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, July, 27, 2000.
- “HALLIBURTON: REPORTS BETTER THAN EXPECTED EPS OF...,” PAINEWEBBER MORNING MEETING NOTES, July, 27, 2000.
- “HALLIBURTON: Q2 RESULTS AHEAD OF ESTS; LOWERING...,” DONALDSON, LUFKIN & JENRETTE MORNING MEETING NOTES, July, 27, 2000.
- “HALLIBURTON CO.,” MORGAN STANLEY, July, 27, 2000.
- “HALLIBURTON CO.,” DEUTSCHE BANK SECURITIES INC., July, 27, 2000.
- “HALLIBURTON CO.,” PNC INSTITUTIONAL INVESTMENT SERVICE, July, 28, 2000.

- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), July, 28, 2000.
- "HALLIBURTON CO.," UBS (US), July, 28, 2000.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, August, 03, 2000.
- "HALLIBURTON CO.," PRUDENTIAL EQUITY GROUP, INC., August, 08, 2000.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, August, 31, 2000.
- "HALLIBURTON CO.," SUN TRUST ROBINSON HUMPHREY CAPITAL MARKETS, September, 01, 2000.
- "HALLIBURTON CO.," RBS (EX-ABN) U.S.A, September, 05, 2000.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, September, 08, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), September, 19, 2000.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., September, 25, 2000.
- "HAL: RECENT MEETING UNCOVERS POTENTIAL... PART 2 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), October, 06, 2000.
- "HAL: RECENT MEETING UNCOVERS POTENTIAL... PART 1 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), October, 06, 2000.
- "HALLIBURTON CO.," CITI, October, 06, 2000.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., October, 09, 2000.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, October, 10, 2000.
- "HALLIBURTON CO.," SOUTHWEST SECURITIES, October, 25, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), October, 25, 2000.
- "HALLIBURTON: EPS IN LINE BUT FUTURE OUTLOOK WORSENING...," PAINEWEBBER MORNING MEETING NOTES, October, 25, 2000.
- "AM CALL: HAL: Q300 IN-LINE GUIDING Q400 AND 2001...," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, October, 25, 2000.
- "HAL: 3Q IN LINE; E&C OUTLOOK WEAK;... PART 2 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), October, 25, 2000.
- "HAL: 3Q IN LINE; E&C OUTLOOK WEAK;... PART 1 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), October, 25, 2000.
- "HALLIBURTON CO.," PAINEWEBBER INC., October, 25, 2000.
- "HALLIBURTON CO.," MORGAN STANLEY, October, 25, 2000.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., October, 25, 2000.
- "HALLIBURTON CO.," CITI, October, 25, 2000.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, October, 26, 2000.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, October, 26, 2000.

- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., October, 26, 2000.
- "HALLIBURTON CO.," ING FINANCIAL MARKETS HISTORY USA, October, 27, 2000.
- "HALLIBURTON CO. (HOLDING CO.) - HISTORY & DEBT," MERGENT FIS - HISTORY & DEBT, October, 31, 2000.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., November, 13, 2000.
- "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., November, 21, 2000.
- "HALLIBURTON CO.," CITI, November, 28, 2000.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), December, 12, 2000.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, December, 14, 2000.
- "COLLESS O'NIELL /BROWN & ROOT PTY LTD [BRIEF]," THOMSON FINANCIAL SECURITIES DATA - M&A, December, 16, 2000.
- "HAL: RESTRUCTURING OF E&C BUSINESS POSITIONS...," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), December, 21, 2000.
- "HALLIBURTON CO.," UBS (US), December, 21, 2000.
- "HALLIBURTON CO.," CITI, December, 21, 2000.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., December, 22, 2000.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., December, 22, 2000.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, December, 26, 2000.
- "HAL: SLIGHT POSITIVE 4Q SURPRISE;... PART 1 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), January, 31, 2001.
- "HAL: SLIGHT POSITIVE 4Q SURPRISE;... PART 2 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), January, 31, 2001.
- "HAL: MEASUREMENT WHILE REPORTING FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, January, 31, 2001.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, January, 31, 2001.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), January, 31, 2001.
- "HALLIBURTON CO.," UBS (US), January, 31, 2001.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., January, 31, 2001.
- "HALLIBURTON CO.," UBS (US), January, 31, 2001.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., January, 31, 2001.
- "HALLIBURTON CO.," CITI, January, 31, 2001.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, February, 08, 2001.
- "HALLIBURTON CO. (HOLDING CO.) - HISTORY & DEBT," MERGENT FIS - HISTORY & DEBT, February, 13, 2001.
- "HALLIBURTON CO.," A.G. EDWARDS & SONS, INC., February, 20, 2001.

- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), March, 23, 2001.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, April, 19, 2001.
- "HAL: SOLID 1Q - RAISING ESTIMATES, REITERATE BUY," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), April, 25, 2001.
- "HALLIBURTON CO.," CITI, April, 25, 2001.
- "HAL: MWR: Q101 IN-LINE, FORWARD GUIDANCE RAISED FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, April, 26, 2001.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, April, 26, 2001.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), April, 26, 2001.
- "HALLIBURTON CO.," UBS (US), April, 26, 2001.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., April, 26, 2001.
- "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., April, 26, 2001.
- "DRESSER EQUIPMENT GROUP /INVESTOR GROUP," THOMSON FINANCIAL SECURITIES DATA - M&A, April, 28, 2001.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, May, 03, 2001.
- "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., May, 16, 2001.
- "HALLIBURTON CO.," SUN TRUST ROBINSON HUMPHREY CAPITAL MARKETS, May, 25, 2001.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, May, 31, 2001.
- "HALLIBURTON CO. (HOLDING CO.) - HISTORY & DEBT," MERGENT FIS - HISTORY & DEBT, June, 05, 2001.
- "HALLIBURTON CO.," PRUDENTIAL EQUITY GROUP, INC., June, 07, 2001.
- "HAL: POSSIBLE ADDITIONAL ASBESTOS EXPOSURE," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), June, 29, 2001.
- "HAL: HALLIBURTON INCREASES ASBESTOS RESERVE....," DEUTSCHE BANC (US) MORNING MEETING NOTES, June, 29, 2001.
- "HALLIBURTON CO.," MORGAN STANLEY, June, 29, 2001.
- "HALLIBURTON CO.," CITI, June, 29, 2001.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, July, 19, 2001.
- "HALLIBURTON CO.," DEUTSCHE BANK SECURITIES INC., July, 25, 2001.
- "HAL: Q2 EARNINGS HIGHER THAN EXPECTED, LED BY HES,...," DEUTSCHE BANC (US) MORNING MEETING NOTES, July, 26, 2001.
- "HAL: Q2 EARNINGS HIGHER THAN EXPECTED, RAISING 2001...," DEUTSCHE BANC (US) MORNING MEETING NOTES, July, 26, 2001.

- "HAL: Q201 BEATS, POSITIVE GUIDANCE FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, July, 26, 2001.
- "HAL: 2Q POSITIVE SURPRISE; HES BOOMING (PART 2 OF 2)," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), July, 26, 2001.
- "HAL: 2Q POSITIVE SURPRISE; HES BOOMING (PART 1 OF 2)," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), July, 26, 2001.
- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, July, 26, 2001.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), July, 26, 2001.
- "HALLIBURTON CO.," MORGAN STANLEY, July, 26, 2001.
- "HALLIBURTON CO.," UBS (US), July, 26, 2001.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., July, 26, 2001.
- "HALLIBURTON CO.," CITI, July, 26, 2001.
- "WHES: Q2 EARNINGS EXCEED EXPECTATIONS, OUTLOOK...," DEUTSCHE BANC (US) MORNING MEETING NOTES, July, 27, 2001.
- "ILEX TECHNOLOGIES LTD /LANDMARK GRAPHICS CORP [BRIEF]," THOMSON FINANCIAL SECURITIES DATA - M&A, July, 28, 2001.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, August, 10, 2001.
- "HALLIBURTON CO.," CITI, August, 14, 2001.
- "HAL: ADJUSTING RISK MODIFIER FOR... PART 2 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), August, 15, 2001.
- "HAL: ADJUSTING RISK MODIFIER FOR... PART 1 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), August, 15, 2001.
- "HALLIBURTON CO.," CITI, August, 22, 2001.
- "COMMERCIAL RESIN DE MEXICO SA /BREDERO-SHAW [BRIEF]," THOMSON FINANCIAL SECURITIES DATA - M&A, September, 01, 2001.
- "HALLIBURTON CO.: INITIATING COVERAGE," JEFFERIES & COMPANY, INC., September, 05, 2001.
- "HAL: LOWERING ESTIMATES; MOVING SECTOR TO OVERWEIGHT FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, September, 20, 2001.
- "HAL: HAL PROVIDES BETTER DEFINITION ON ASBESTOS...," DEUTSCHE BANC (US) MORNING MEETING NOTES, October, 05, 2001.
- "HALLIBURTON CO.," MORGAN STANLEY, October, 12, 2001.
- "HALLIBURTON CO.," UBS (US), October, 22, 2001.
- "HALLIBURTON CO.," CITI, October, 23, 2001.
- "HAL: LOWERING EPS ESTIMATE FOR 2002," BEAR, STEARNS MORNING MEETING NOTES, October, 24, 2001.
- "HALLIBURTON CO.," BEAR, STEARNS & CO., INC., October, 24, 2001.

- “HALLIBURTON CO.,” RBC CAPITAL MARKETS (US), October, 24, 2001.
- “HALLIBURTON CO.,” UBS (US), October, 24, 2001.
- “HALLIBURTON CO.,” MORGAN STANLEY, October, 24, 2001.
- “HALLIBURTON CO.,” CIBC WORLD MARKETS CORP., October, 24, 2001.
- “HALLIBURTON CO.,” JEFFERIES & COMPANY, INC., October, 24, 2001.
- “HALLIBURTON CO.,” UBS (US), October, 25, 2001.
- “HAL: FURTHER ASBESTOS DEVELOPMENTS,” SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), October, 31, 2001.
- “HALLIBURTON CO.,” CITI, October, 31, 2001.
- “HALLIBURTON CO.,” CITI, November, 09, 2001.
- “GVA CONSULTANTS AB(CELSIUS AB) /KELLOGG BROWN & ROOT [BRIEF],” THOMSON FINANCIAL SECURITIES DATA - M&A, November, 17, 2001.
- “HAL: HALLIBURTON GUIDES EARNINGS LOWER,” BEAR, STEARNS MORNING MEETING NOTES, November, 21, 2001.
- “HALLIBURTON CO.,” JEFFERIES & COMPANY, INC., November, 21, 2001.
- “HALLIBURTON CO.,” PNC INSTITUTIONAL INVESTMENT SERVICE, December, 04, 2001.
- “HALLIBURTON CO.,” UBS (US), December, 04, 2001.
- “HAL: BETTER ASBESTOS DISCLOSURE DOES NOT HELP STOCK...,” DEUTSCHE BANC (US) MORNING MEETING NOTES, December, 05, 2001.
- “HALLIBURTON CO. (HOLDING CO.),” MERGENT, INC. - COMPANY REPORT, December, 06, 2001.
- “HAL: DOWNGRADING ON MOUNTING ASBESTOS LIABILITIES,” SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), December, 07, 2001.
- “HALLIBURTON CO.,” PNC INSTITUTIONAL INVESTMENT SERVICE, December, 07, 2001.
- “HALLIBURTON CO.,” JEFFERIES & COMPANY, INC., December, 07, 2001.
- “HALLIBURTON CO.,” UBS (US), December, 07, 2001.
- “HALLIBURTON CO.,” CITI, December, 07, 2001.
- “MAGIC EARTH INC /HALLIBURTON CO [BRIEF],” THOMSON FINANCIAL SECURITIES DATA - M&A, December, 08, 2001.
- “HAL: ASBESTOS JUDGMENTS UNNERVE INVESTORS,” BEAR, STEARNS MORNING MEETING NOTES, December, 10, 2001.
- “HAL: ADVERSE JUDGEMENTS ON ASBESTOS ISSUE CONTINUE TO...,” DEUTSCHE BANC (US) MORNING MEETING NOTES, December, 10, 2001.
- “HALLIBURTON CO.,” MORGAN STANLEY, December, 10, 2001.
- “HALLIBURTON CO.,” UBS (US), December, 10, 2001.
- “HALLIBURTON CO.,” JEFFERIES & COMPANY, INC., December, 10, 2001.
- “HALLIBURTON CO.,” RBS (EX-ABN) U.S.A, December, 10, 2001.

- "HAL: THE SCARLET LETTER STRIKES AGAIN FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, December, 11, 2001.
- "HAL: PROVIDES MORE DETAIL ON ASBESTOS LIAB...," BEAR, STEARNS MORNING MEETING NOTES, December, 11, 2001.
- "HALLIBURTON CO.," CIBC WORLD MARKETS INC. (CANADA), December, 11, 2001.
- "HALLIBURTON CO.," BEAR, STEARNS & CO., INC., December, 11, 2001.
- "HALLIBURTON CO.: INITIATING COVERAGE," CREDIT SUISSE - FIXED INCOME, December, 11, 2001.
- "HALLIBURTON CO.," MORGAN KEEGAN & CO., December, 11, 2001.
- "HALLIBURTON CO.," CITI, December, 11, 2001.
- "HALLIBURTON CO.," CREDIT SUISSE - FIXED INCOME, December, 18, 2001.
- "HAL: TRIMMING 4Q ESTIMATE ON WEAK PRESSURE PUMPING...," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), December, 24, 2001.
- "HALLIBURTON CO.," CITI, December, 24, 2001.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., January, 04, 2002.
- "HALLIBURTON CO.," UBS (US), January, 07, 2002.
- "HAL: REVISING 2002 AND INTRODUCING 2003 EARNINGS...," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, January, 22, 2002.
- "HAL: POSITIVE 4Q SURPRISE; ESTIMATES GUIDED LOWER," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), January, 23, 2002.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., January, 23, 2002.
- "HALLIBURTON CO.," CITI, January, 23, 2002.
- "HAL: POSITIVE 4Q SURPRISE; ESTIMATES... PART 1 OF 2," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), January, 24, 2002.
- "HAL: MEASUREMENT WHILE REPORTING FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, January, 24, 2002.
- "HAL: LOWERING EPS ESTIMATE FOR 2002," BEAR, STEARNS MORNING MEETING NOTES, January, 24, 2002.
- "HAL Q4 ERNS IN LINE: LOWERING ESTS FOR WEAKER...," DEUTSCHE BANC (US) MORNING MEETING NOTES, January, 24, 2002.
- "HALLIBURTON CO.," FROST SECURITIES INC., January, 24, 2002.
- "HALLIBURTON CO.," UBS (US), January, 24, 2002.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., January, 24, 2002.
- "HALLIBURTON CO.," MORGAN STANLEY, January, 24, 2002.
- "HALLIBURTON CO.," UBS (US), January, 24, 2002.
- "HALLIBURTON CO.," CITI, January, 24, 2002.
- "HALLIBURTON CO.," RBS (EX-ABN) U.S.A, January, 24, 2002.
- "HALLIBURTON CO.," CREDIT SUISSE - FIXED INCOME, January, 25, 2002.

- "HALLIBURTON CO.," PNC INSTITUTIONAL INVESTMENT SERVICE, January, 28, 2002.
- "HALLIBURTON CO.," SUN TRUST ROBINSON HUMPHREY CAPITAL MARKETS, January, 28, 2002.
- "HALLIBURTON CO.," MORGAN STANLEY, January, 29, 2002.
- "HALLIBURTON CO.," MORGAN STANLEY, January, 29, 2002.
- "HALLIBURTON CO.," CITI, February, 14, 2002.
- "HAL: HARBISON WALKER BANKRUPTCY FILING LIKELY TO HAVE...," DEUTSCHE BANC (US) MORNING MEETING NOTES, February, 15, 2002.
- "HAL: HARBISON-WALKER FILES CHAPTER 11; DRESSER...," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), February, 15, 2002.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., February, 15, 2002.
- "HALLIBURTON CO.," JEFFERIES & COMPANY, INC., February, 15, 2002.
- "HALLIBURTON CO.," CITI, February, 15, 2002.
- "HALLIBURTON CO.," RBS (EX-ABN) U.S.A, February, 15, 2002.
- "HAL: NEW FRONT OPENS IN ASBESTOS WAR FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, February, 19, 2002.
- "HALLIBURTON CO.," BEAR, STEARNS & CO., INC., February, 19, 2002.
- "HALLIBURTON CO.," CREDIT SUISSE - FIXED INCOME, February, 19, 2002.
- "HALLIBURTON COMPANY," RBC CAPITAL MARKETS (US), February, 26, 2002.
- "EXPANDABLE TECHNOLOGY AGREEMENT WITH SHELL FURTHER...," DEUTSCHE BANC (US) MORNING MEETING NOTES, March, 05, 2002.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), March, 06, 2002.
- "HALLIBURTON CO. (HOLDING CO.)," MERGENT, INC. - COMPANY REPORT, March, 11, 2002.
- "HALLIBURTON CO.," MORGAN STANLEY, March, 12, 2002.
- "HAL - LOSS IN INSURANCE DISPUTE A MODEST NEGATIVE....," DEUTSCHE BANC (US) MORNING MEETING NOTES, March, 14, 2002.
- "HAL: HALLIBURTON LOSES HIGHLANDS INSURANCE APPEAL," SMITH BARNEY CITIGROUP (MORNING MEETING NOTES), March, 14, 2002.
- "HALLIBURTON CO.," CREDIT SUISSE FIRST BOSTON CORPORATION, March, 14, 2002.
- "HALLIBURTON CO.," RBC CAPITAL MARKETS (US), March, 14, 2002.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., March, 14, 2002.
- "HALLIBURTON CO.," MORGAN STANLEY, March, 14, 2002.
- "HALLIBURTON COMPANY," CITI, March, 14, 2002.
- "HAL: FIGHTING THROUGH THE ASBESTOS JUNGLE," BEAR, STEARNS MORNING MEETING NOTES, March, 15, 2002.
- "HAL: TO RESTRUCTURE INTO TWO SEPARATE UNITS FBC," CREDIT SUISSE FIRST BOSTON MORNING MEETING NOTES, March, 20, 2002.

- "HAL-RESTRUCTURING CREATES LONG-TERM VALUE, BUT...," DEUTSCHE BANC (US) MORNING MEETING NOTES, March, 20, 2002.
- "HALLIBURTON CO.," CREDIT SUISSE FIRST BOSTON CORPORATION, March, 20, 2002.
- "HALLIBURTON CO.," CIBC WORLD MARKETS CORP., March, 21, 2002.
- "HALLIBURTON CO.," HIBERNIA SOUTHCOAST CAPITAL, March, 28, 2002.
- "ENERGY MARKET FLASH," CREDIT SUISSE, July 25, 2002.
- "HAL ANNOUNCES CHARGES FOR ASBESTOS REORGANIZATION," MORGAN STANLEY, July 23, 2002.

Academic Articles, Books, and Other Texts

- All Academic Literature, Textbooks and Trade Publication listed in Allen Report Appendix B
- Mike Aickin and Helen Gensler, "Adjusting for Multiple Testing when Reporting Research Results: The Bonferroni vs Holm Methods," *American Journal of Public Health*, May 1996, Vol. 86, No. 5, pp. 726-728.
- American Academy of Actuaries' Mass Torts Subcommittee, *Overview of Asbestos Claims Issues and Trends*, August 2007.
- Richard A. Armstrong, When to Use the Bonferroni Correction," *Opthalmic & Physiological Optics*, 2014, Vol. 34, pp. 502-508.
- Ray Ball and S.P. Kothari, "Security Returns Around Earnings Announcements," *The Accounting Review*, Vol.66, No. 4, 1991, pp. 718-738.
- Phillip A. Braun, Daniel B. Nelson, and Alain M. Sunier, "Good News, Bad News Volatility, and Betas," *Journal of Finance* 50, No. 5, 1995.
- Campbell, Lo, and MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, New Jersey, 1997, pp. 479-498.
- Eugene Fama, Lawrence Fisher, Michael Jensen & Richard Roll, "The Adjustment of Stock Prices to New Information," *International Economic Review,* 10 (1), February 1969.
- John D. Finnerty, "A Closer Look at Correction for False Discovery Bias When Making Multiple Comparisons*," Journal of Forensic Economics*, Vol. 21, No.1, 2009, pp. 55-62.
- Stanton A. Glantz, *Primer of Biostatistics*, 2005
- Damodar N. Gujarati, *Basic Econometrics*, Third Edition, 1995
- Avner Kalay and Uri Lowenstein, "Predictable Events and Excess Returns: The Case of Dividend Announcements," *Journal of Financial Economics*, Vol. 14, 1985, pp. 423-449.
- David Kaye and David Freedman, *Reference Guide on Statistics*, in *Reference Manual on Scientific Evidence, Third Edition*, Federal Judicial Center, 2011
- George A Milliken and Dallas E. Johnson, 2009, *Analysis of Messy Data: Designed Experiments*, Second Edition, Volume 1, CRC Press
- Eugene Pilotte and Timothy Manuel, "The Market's Response to Recurring Events: The Case of Stock Splits," *Journal of Financial Economics*, Vol. 41, 1996, pp.111-127.
- Mark D. Plevin, Paul W. Kalish and Kelly R. Cusick, "Mealey's Asbestos Bankruptcy Report, Where Are They Now, Part Four: A Continuing History of the Companies That

Have Sought Bankruptcy Protection Due to Asbestos Claims," *Crowell & Moring LLP*, February 2007.

- Hardeo Sahai and Mohammed I. Ageel, 2000, *The Analysis of Variance: Fixed, Random, and Mixed Models*, Springer Science & Business Media.
- David I. Tabak, "Comment: 'A Closer Look at Correction for False Discovery Bias When Making Multiple Comparisons'," *Journal of Forensic Economics*, Vol. 21, No.1, 2009, pp. 105-107.

Production Documents

- SCA00017984-8027
- SCA00032483
- SCA00050413-0433
- SCA00152753-2757
- SCA00152987-2988
- SCA00153006-3009
- SCA00351271-1272
- SCA00351279
- SCA00351283-1285
- SCA00430448
- AA AMSF 00004487-4489

I considered all materials referenced in my report if not explicitly listed here.

APPENDIX B

CHAD W. COFFMAN, MPP, CFA

Global Economics Group, LLC
140 South Dearborn Street, Suite 1000
Chicago, IL 60603
Office: (312) 470-6500
Mobile: (815) 382-0092
Email: ccoffman@globaleconomicsgroup.com

EMPLOYMENT:

Global Economics Group, LLC
President (2008 - Current)

Global Economics Group specializes in the application of economics, finance, statistics, and valuation principles to questions that arise in a variety of contexts, including litigation and policy matters throughout the world. With offices in Chicago, Boston, and New York, Principals of Global Economics Group have extensive experience in high-profile securities, antitrust, labor, and intellectual property matters.

Market Platform Dynamics, LLC
Chief Financial Officer & Chief Operating Officer (2010 – Current)

Market Platform Dynamics is a management consulting firm that specializes in assisting platform-based companies profit from industry disruption caused by the introduction of new technologies, new business models and/or new competitive threats. MPD's experts include economists, econometricians, product development specialists, strategic marketers and recognized thought leaders who apply cutting-edge research to the practical problems of building and running a profitable business.

Chicago Partners, LLC
Principal (2007 – 2008)
Vice President (2003 – 2007)
Director (2000 – 2003)
Senior Associate (1999 – 2000)
Associate (1997 – 1999)
Research Analyst (1995 – 1997)

EDUCATION:

CFA Chartered Financial Analyst, 2003

M.P.P. University of Chicago, 1997
Masters of Public Policy, with a focus in economics including coursework in Finance, Labor Economics, Econometrics, and Regulation

B.A. Knox College, 1995
Economics, Magna Cum Laude
Graduated with College Honors for Paper entitled "Increasing Efficiency in Water Supply Pricing: Using Galesburg, Illinois as a Case Study"
Dean's List Every Term
Phi Beta Kappa

PROFESSIONAL EXPERIENCE:

Securities, Valuation, and Market Manipulation Cases:

- Testifying Expert in numerous high-profile class action securities matters including, but not limited to:
  - In Re: Bank of America Corp. Securities, Derivative, and Employee Retirement Income Security Act (ERISA) Litigation. Parties settled for $2.4 billion in which I served as Plaintiffs' damages and loss causation expert.
  - In Re: Schering-Plough Corporation/ Enhance Securities Litigation. Parties settled for $473 million in which I served as Plaintiffs' damages and loss causation expert.
  - In Re: Computer Sciences Corporation Securities Litigation. Parties settled for $98 million in which I served as Plaintiffs' damages and loss causation expert.
  - Full list of testimonial experience over the last four years is provided below.

- Engaged several dozen times as a neutral expert by prominent mediators to evaluate economic analyses of other experts.

- Expert consultant for the American Stock Exchange (AMEX) where I evaluated issues related to multiple listing of options. Performed econometric analysis of various measures of option spread using tens of millions of trades.

- Performed detailed audit of CDO valuation models employed by a banking institution to satisfy regulators – non-litigation matter.

- Played significant role in highly-publicized internal accounting investigations of two Fortune 500 companies. One led to restatement of previously issued financial statements and both involved SEC investigations.

Testimony (last 4 years):

- Testifying expert in Schering-Plough Corporation/ENHANCE Securities Litigation Case No.2:08-cv-00397 (DMC) (JAD), United States District Court, District of New Jersey. Filed declaration February 7, 2011. Filed expert report September 15, 2011. Filed rebuttal expert report October 28, 2011. Filed declaration January 30, 2012. Deposition November 15, 2011 and November 29, 2011.

- Testifying expert in Bank of America Corp. Securities, Derivative, and Employee Retirement Income Security Act (ERISA) Litigation, Master File No. 09 MDL 2058 (PKC), United States District Court for the Southern District of New York. Filed expert report August 29, 2011. Filed rebuttal expert report September 26, 2011. Filed expert report March 16, 2012. Filed rebuttal expert

report April 9, 2012. Filed rebuttal expert report April 29, 2012. Deposition October 14, 2011 and May 24, 2012.

- Testifying expert in Toyota Motor Corporation Securities Litigation, Case No. 10-922 DSF (AJWx), United States District Court, Central District of California. Filed expert report February 17, 2012. Deposition March 28, 2012. Filed rebuttal expert report August 2, 2012. Filed declaration re: Plan of Allocation January 28, 2013.

- Testifying expert in The West Virginia Investment Management Board and the West Virginia Consolidated Public Retirement Board v. The Variable Annuity Life Insurance Company, Civil No. 09-C-2104, Circuit Court of Kanawha County, West Virginia. Filed expert report June 1, 2012. Deposition June 19, 2013.

- Testifying expert in Aracruz Celulose S.A. Securities Litigation, Case No. 08-23317-CIV-LENARD, United States District Court, Southern District of Florida. Filed expert report July 20, 2012. Deposition September 14, 2012. Filed rebuttal expert report October 29, 2012. Filed declaration re: Plan of Allocation May 20, 2013.

- Testifying expert in In Re Computer Sciences Corporation Securities Litigation, CIV. A. No. 1:11-cv-610-TSE-IDD, United States District Court, Eastern District of Virginia, Alexandria Division. Filed expert report November 9, 2012. Filed supplemental report February 18, 2013. Filed rebuttal expert report March 25, 2013. Deposition March 27, 2013. Filed declaration re: Plan of Allocation August 7, 2013.

- Testifying expert in In Re Weatherford International Securities Litigation, Case 1:11-cv-01646-LAK, United States District Court for the Southern District of New York. Filed expert report April 1, 2013. Deposition April 26, 2013.

- Testifying expert in In Re: Regions Morgan Keegan Closed-End Fund Litigation, Case 2:07-cv-02830-SHM-dkv, United States District Court for the Western District of Tennessee Western Division. Court testimony April 12, 2013.

- Testifying expert in City of Roseville Employees' Retirement System and Southeastern Pennsylvania Transportation Authority, derivatively on behalf of Oracle Corporation, Plaintiff, v. Lawrence J. Ellison, Jeffrey S. Berg, H. Raymond Bingham, Michael J. Boskin, Safra A. Catz, Bruce R. Chizen, George H. Conrades, Hector Garcia-Molina, Donald L. Lucas, and Naomi O. Seligman, Defendants, and Oracle Corporation, Nominal Defendant, C.A. No. 6900-CS, Court of Chancery of the State of Delaware. Filed expert report May 13, 2013. Filed rebuttal expert report June 21, 2013. Deposition July 17, 2013.

- Testifying expert in In Re BP plc Securities Litigation, No. 4:10-md-02185, Honorable Keith P. Ellison, United States District Court for the Southern District of Texas, Houston Division. Filed expert report June 14, 2013. Deposition July 25, 2013. Filed rebuttal expert report October 7, 2013. Filed declaration re: Plaintiff accounting losses November 17, 2013. Filed expert report January 6, 2014. Deposition January 22, 2014. Filed rebuttal expert report March 12, 2014. Filed expert report March 17, 2014. Hearing testimony April 21, 2014. Deposition June 3, 2014. Filed declaration re: damages June 3, 2014.

- Testifying expert in In Re Celestica Inc. Securities Litigation, Civil Action No. 07-CV-00312-GBD, United States District Court for the Southern District of New York. Filed expert report June 14, 2013. Filed rebuttal expert report September 10, 2013. Deposition September 24, 2013.

- Testifying expert in In Re BNP Paribas Mortgage Corporation and BNP Paribas v. Bank of America, N.A., Master Docket No. 09-cv-9783-RWS, United States District Court for the Southern District of New York. Filed expert report November 25, 2013. Deposition June 26-27, 2014.

Experience in Labor Economics and Discrimination-Related Cases:

- Expert consultant for Cargill in class action race discrimination matter in which class certification was defeated.

- Expert consultant for 3M in class action age discrimination matter.

- Expert consultant for Wal-Mart in class action race discrimination matter.

- Expert consultant on various other significant confidential labor economics matters in which there were class action allegations related to race, age and gender.

- Expert consultant for large insurance company related to litigation and potential regulation resulting from the use of credit scores in the insurance underwriting process.

Testimony (last 4 years):

- Testifying expert in Maureen Moriarty v. Dyson, Inc., Case No. 09 CV 2777, United States District Court for the Northern District of Illinois, Eastern Division. Filed expert report October 12, 2011. Deposition November 10, 2011.

Selected Experience in Antitrust, General Damages, and Other Matters:

- Expert consultant in high-profile antitrust matters in the computer and credit card industries.

- Expert consultant for plaintiffs in re: Brand Name Drugs Litigation. Responsible for managing, maintaining and analyzing data totaling over one billion records in one of the largest antitrust cases ever filed in the Federal Courts.

- Served as neutral expert for mediator (Judge Daniel Weinstein) in allocating a settlement in an antitrust matter.

- Expert consultant in Seminole County and Martin County absentee ballot litigation during disputed presidential election of 2000.

- Expert consultant for sub-prime lending institution to determine effect of alternative loan amortization and late fee policies on over 20,000 customers of a sub-prime lending institution. Case settled favorably at trial immediately after the testifying expert presented an analysis I developed showing fundamental flaws in opposing experts calculations.

TEACHING EXPERIENCE:

KNOX COLLEGE, Teaching Assistant - Statistics, (1995)
KNOX COLLEGE, Tutor in Mathematics, (1992 - 1993)

PUBLICATIONS:

Coffman, Chad and Mary Gregson, "Railroad Construction and Land Value." *Journal of Real Estate and Finance*, 16:2, pp. 191-204 (1998).

Coffman, Chad, Tara O'Neil, and Brian Starr, Ed. Richard D. Kahlenberg, "An Empirical Analysis of the Impact of Legacy Preferences on Alumni Giving at Top Universities," *Affirmative Action for the Rich: Legacy Preferences in College Admissions*; pp. 101-121 (2010).

PROFESSIONAL AFFILIATIONS:

Associate Member CFA Society of Chicago
Associate Member CFA Institute
Phi Beta Kappa

AWARDS:

1994 Ford Fellowship Recipient for Summer Research.
1993 Arnold Prize for Best Research Proposal.
1995 Knox College Economics Department Award.

PERSONAL ACTIVITIES:

- Pro bono consulting for Cook County State's Attorney's Office.
- Pro bono consulting for Cook County Health & Hospitals System – Developed method for hospital to assess real-time patient level costs to assist in improving care for Cook County residents and prepare for implementation of Affordable Care Act.
- Pro bono consulting for Chicago Park District to analyze economic impact of park district assets and assist in developing strategic framework for decision-making.

APPENDIX C

Alleged Misrepresentation / Omission	Date	Topic
Halliburton reported its 2nd Q 99 results and held earnings call.	July 22, 1999	Asbestos / Accounting
Halliburton filed its 2nd Q 99 10-Q.	August 13, 1999	Asbestos / Accounting
Halliburton reported 3rd Q 99 results and held earnings call.	October 21, 1999	Asbestos / Accounting
Halliburton filed its 3rdQ 99 10-Q.	November 15, 1999	Asbestos / Accounting
Halliburton filed amended 2nd Q 99 10-Q.	January 11, 2000	Asbestos / Accounting
Halliburton reported its 4th Q 99 results and held earnings call.	January 27, 2000	Asbestos / Accounting
Halliburton filed its 1999 Annual Report.	March 14, 2000	Asbestos / Accounting
Halliburton reported its 1st Q 00 results.	April 26, 2000	Asbestos / Accounting
Halliburton filed its 1st Q 00 10-Q.	May 15, 2000	Asbestos / Accounting
Halliburton reported 2ndQ 00 results and held earnings call.	July 26, 2000	Asbestos / Accounting
Halliburton filed its 2nd Q 00 10-Q.	August 10, 2000	Asbestos / Accounting
Halliburton filed its 3rd Q 00 10-Q.	November 9, 2000	Asbestos / Accounting

Alleged Misrepresentation / Omission	Date	Topic
Halliburton reported 4Q00 results and held earnings call.	January 30, 2001	Asbestos
Jefferies & Co. issued a report based on Halliburton conference call and follow-up conversations with Lesar.	January 31, 2001	Asbestos
Halliburton filed its 2000 Annual Report	March 27, 2001	Asbestos
Halliburton filed its 1st Q 01 10-Q.	May 11, 2001	Asbestos
Halliburton announced that Harbison-Walker claims could require an additional reserve of $60 million.	June 28, 2001	Asbestos
Halliburton reported 2Q 01 results and held earnings call.	July 25, 2001	Asbestos
Halliburton filed its 2nd Q 01 10-Q.	August 9, 2001	Asbestos
Halliburton management discussed Halliburton's asbestos liability situation at Deutsche Bank seminar.	October 4, 2001	Asbestos
Deutsche Banc Alex. Brown issued a report on Halliburton reporting on Foshee's statements.	October 5, 2001	Asbestos
Halliburton reported 3Q 01 results and held earnings call	October 23, 2001	Asbestos
Halliburton filed its 3rdQ 01 10-Q.	November 8, 2001	Asbestos

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

THE ARCHDIOCESE OF MILWAUKEE SUPPORTING FUND, INC., et al., Plaintiff, vs. HALLIBURTON COMPANY, et al., Defendants.	No. 3:02-CV-1152-M

EXPERT REPORT

OF

LUCY P. ALLEN

September 10, 2014

TABLE OF CONTENTS

I. Scope of Assignment

1. I have been asked by Counsel for Halliburton Company ("Halliburton" or "the Company") and David J. Lesar to analyze the price impact of the alleged misrepresentations in the Fourth Consolidated Amended Complaint ("Complaint") filed by the Erica P. John Fund, Inc. ("the Fund"). In particular, I was asked to analyze the price impact of the alleged misrepresentations in three areas:

a) cost savings from Halliburton's merger with Dresser Industries;

b) accounting for unapproved claims on fixed-price construction contracts; and

c) reporting of estimated financial liability arising out of Halliburton's exposure to asbestos claims.

II. Qualifications and Remuneration

A. Qualifications

2. I am a Senior Vice President of NERA Economic Consulting ("NERA") and member of NERA's Securities and Finance Practice. NERA provides practical economic advice related to highly complex business and legal issues arising from competition, regulation, public policy, strategy, finance, and litigation. It was established in 1961 and now employs approximately 500 people in more than 20 offices worldwide. NERA's Securities and Finance Practice, which performs research in securities and financial markets, dates from the early 1970s and employs a research staff of more than 100 professionals holding degrees in economics, finance, and mathematics. The practice group counts among its clients major securities exchanges, risk managers, principals needing valuation services, and parties in litigation.

3. I have an A.B. from Stanford University, an M.B.A. with a concentration in Finance and Accounting from Yale University, and M.A. and M. Phil. degrees in Economics, also from Yale University. Prior to joining NERA, I was an Economist for both President George H. W. Bush's and President Bill Clinton's Council of Economic Advisers, providing economic analysis on regulation and health care policy issues. In my 19 years at NERA, I have been engaged as an economic consultant or expert witness in numerous projects involving securities and financial economics. In the course of this work, I have analyzed the effect of

information on the stock prices of over 100 companies. My resume with recent publications and testifying experience is included as Appendix A.

B. Remuneration

4. NERA is being compensated for the time spent by me and my team at standard billing rates and for out-of-pocket expenses at cost. NERA currently bills for my time at $725 per hour. NERA's fees are not in any way contingent upon the outcome of this matter.

III. Materials Considered

5. Materials considered in preparing this report are listed in Appendix B.

IV. Summary of Report

6. I found there was no price impact from any of the alleged misrepresentations as discussed in detail in each section below.

7. In this report, I discuss my general methodology, the statistical analysis of the price reactions after each alleged misrepresentation, and the analysis of the price impact of each of the three categories of alleged misrepresentations. This report is structured as follows:

- **Section VI** – Methodology.
- **Section VII** – Statistical analysis of the alleged misrepresentation dates:

  07/22/99, 08/13/99, 09/13/99, 10/21/99, 11/15/99, 01/27/00, 03/14/00, 04/26/00, 05/15/00, 07/26/00, 08/10/00, 11/09/00, 01/30/01, 03/27/01, 04/25/01, 05/11/01, 05/25/01, 06/28/01, 07/25/01, 08/09/01, 08/22/01, 09/04/01, 10/04/01, 10/23/01, 11/08/01.

- **Section VIII** – Alleged misrepresentations regarding cost savings from the Dresser merger, including alleged corrective disclosure dates:

  07/22/99, 08/13/99, 09/13/99, 10/04/99, 10/21/99, 11/15/99, 01/05/00, 01/27/00, 03/14/00, 04/26/00, 05/15/00, 07/26/00, 08/10/00, 10/24/00, 11/09/00, 12/21/00, 12/22/00, 01/30/01.

- **Section IX** – Alleged misrepresentations regarding accounting for unapproved claims, including alleged corrective disclosure dates:

07/22/99, 08/13/99, 09/13/99, 10/04/99, 10/21/99, 11/15/99, 01/05/00, 01/27/00, 03/14/00, 04/26/00, 05/15/00, 07/26/00, 08/10/00, 10/24/00, 11/09/00, 12/21/00, 12/22/00, 01/30/01.

- **Section X** – Alleged misrepresentations regarding reported asbestos liability, including alleged corrective disclosure dates:

  07/22/99, 08/13/99, 09/13/99, 10/21/99, 11/15/99, 01/27/00, 03/14/00, 04/26/00, 05/15/00, 07/26/00, 08/10/00, 11/09/00, 01/30/01, 03/27/01, 04/25/01, 05/11/01, 05/25/01, 06/28/01, 07/25/01, 08/09/01, 08/22/01, 09/04/01, 10/04/01, 10/23/01, 10/30/01, 11/01/01, 11/08/01, 12/04/01, 12/05/01, 12/07/01.

V. BACKGROUND

8. The Fund alleges that Halliburton's stock price was inflated between June 3, 1999 and December 7, 2001 (the "class period") as a result of Halliburton's purportedly false and misleading statements.[1] According to the Complaint, these alleged misrepresentations fall into three categories:[2]

- **Cost savings from Halliburton's merger with Dresser Industries**: The Fund alleges Halliburton falsely stated that cost savings from the merger were expected to be approximately $500 million and that the merger was "behind us."[3]

- **Accounting for unapproved claims on fixed-priced construction contracts**: The Fund alleges that Halliburton misrepresented its accounting for unapproved claims on fixed-priced construction contracts. According to the Fund, the Company first disclosed to investors its new policy for accounting for unapproved claims in its 1999 10-K.[4] The Company's 1999 10-K stated, "Claims and change orders which are in the process of being negotiated with customers, for extra work or changes in the scope of work are included in revenue when collection is deemed probable."[5] The Fund claims that this

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[1] Complaint, ¶1.

[2] Complaint, ¶2.

[3] Complaint, ¶¶110, 115, 121, 122.

[4] Complaint, ¶¶213, 231.

[5] Halliburton 1999 Form 10-K, filed March 14, 2000, p.34.

statement and Halliburton's financial statements were misleading because Halliburton allegedly included unapproved claims in revenue even when their collection was not probable.[6]

- **Reporting of asbestos liability arising out of Halliburton's exposure to asbestos claims:** The Fund alleges that Halliburton misrepresented its reported asbestos liability.[7]

9. The Complaint alleges 25 separate dates on which Halliburton made misrepresentations that purportedly inflated its stock price. The chart below shows Halliburton's stock price along with the 25 dates on which the Fund alleges misrepresentations occurred. The chart also shows the 13 alleged corrective disclosures—dates on which either the Fund or the Fund's previous expert, Jane Nettesheim, claims part of the alleged "truth" regarding the alleged misrepresentations was disclosed to the market. Six of these alleged corrective disclosures are alleged in the Complaint (D3, D4, D6, D7, D11, and D13 in the chart below). The other seven are alleged to be corrective disclosures only by Ms. Nettesheim. Note that three dates are alleged to be both misrepresentations and corrective disclosures. Overall, there are 35 separate dates that are alleged to be either misrepresentations and/or corrective disclosures.

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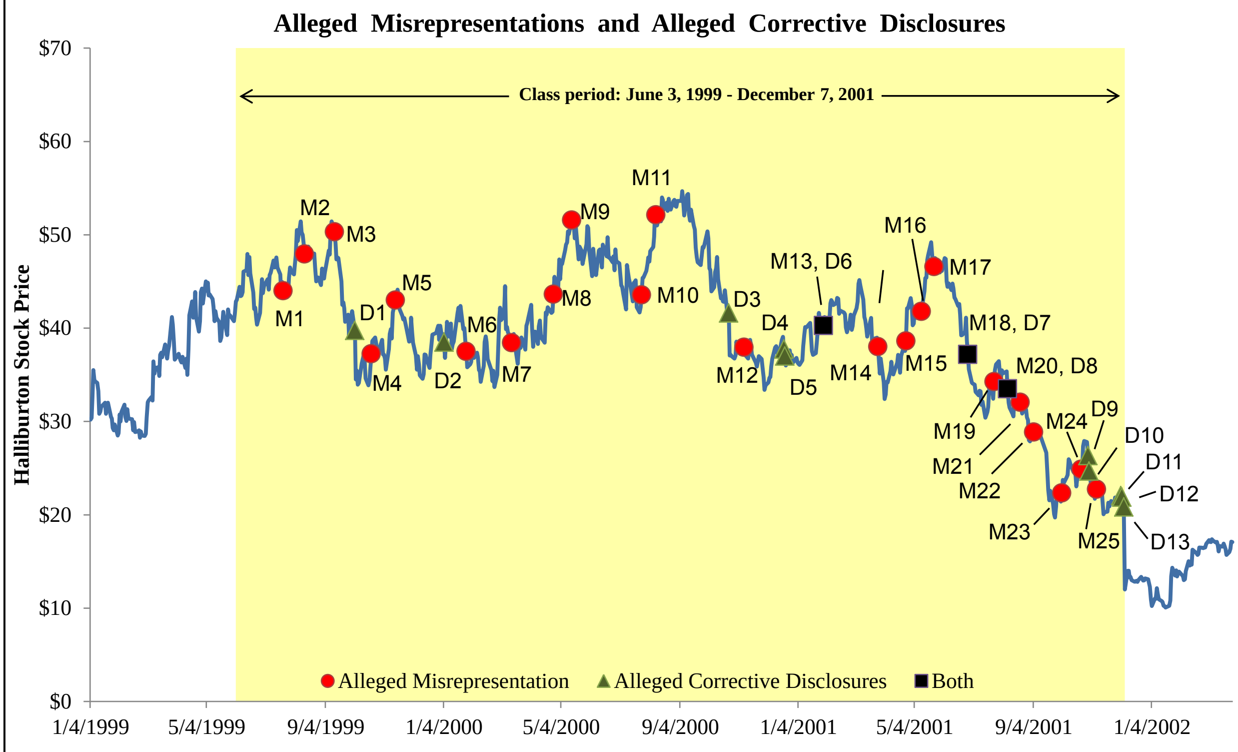
6 Complaint, ¶¶213, 231.

7 Complaint, ¶¶16, 38.



Notes and Sources:
Price data collected from Factset Research Systems, Inc.
Alleged misrepresentations and alleged corrective disclosures aggregated from the Complaint and the Nettesheim reports.

10. The table below summarizes the 25 dates on which the Fund alleges misrepresentations occurred:

		Alleged Misrepresentations	Allegation Category[8]
M1	7/22/99	Halliburton reported 2Q99 results and held earnings call.	All
M2	8/13/99	Halliburton filed its 2Q99 10-Q.	All
M3	9/13/99	Halliburton presented at Dain Rauscher Wessels conference.	All
M4	10/21/99	Halliburton reported 3Q99 results and held earnings call.	All

[8] The Complaint discusses alleged misrepresentations in groups, and each group is followed by a list of reasons detailing why the group of alleged misrepresentations is false and misleading. The reasons fall into three categories of allegations: merger-related cost savings ("Merger"), accounting for unapproved claims ("Unapproved"), or reporting of asbestos liability ("Asbestos"). The individual misrepresentations in each group are categorized based on the list of reasons following the respective group, which may contain reasons falling into one, some or all of the allegation categories. Following the last alleged corrective disclosure related to cost savings and accounting for unapproved claims, all subsequent alleged misrepresentations are categorized as "Asbestos."

		Alleged Misrepresentations	**Allegation Category**[8]
M5	11/15/99	Halliburton filed its 3Q99 10-Q.	All
M6	1/27/00	Halliburton reported 4Q99 results and held earnings call.	All
M7	3/14/00[9]	Halliburton issued its 1999 Annual Report.	All
M8	4/26/00	Halliburton reported 1Q00 results and held earnings call.	All
M9	5/15/00	Halliburton filed its 1Q00 10-Q.	All
M10	7/26/00	Halliburton reported 2Q00 results and held earnings call.	All
M11	8/10/00	Halliburton filed its 2Q00 10-Q.	All
M12	11/9/00	Halliburton filed its 3Q00 10-Q.	All
M13	1/30/01	Halliburton reported 4Q00 results and held earnings call.	Asbestos
M14	3/27/01[10]	Halliburton issued its 2000 Annual Report.	Asbestos
M15	4/25/01	Halliburton reported 1Q01 results.	Asbestos
M16	5/11/01	Halliburton filed its 1Q01 10-Q.	Asbestos
M17	5/25/01	Robinson-Humphrey issued report after discussion with Halliburton management.	Asbestos
M18	6/28/01	Halliburton announced Harbison-Walker claims could require an additional reserve of $60 million.	Asbestos
M19	7/25/01	Halliburton reported 2Q01 results and held earnings call.	Asbestos
M20	8/9/01	Halliburton filed its 2Q01 10-Q.	Asbestos
M21	8/22/01	Salomon Smith Barney, after discussions with Halliburton management, issued a report on Halliburton's asbestos exposure.	Asbestos

[9] According to the Complaint, the 1999 Annual Report was issued "[i]n early 4/00" (Complaint, ¶122). The 1999 Annual Report is not dated but it is my understanding it was filed along with Halliburton's 1999 Form 10-K with the Securities and Exchange Commission ("SEC") on March 14, 2000.

[10] According to the Complaint, the 2000 Annual Report was issued "[i]n early 4/01" (Complaint, ¶158). The analyses in this report have been conducted under two assumptions regarding when the 2000 Annual Report first became public: first, assuming it became public on March 27, 2001, when Halliburton's 2000 Form 10-K was filed with the SEC; second, as an alternative, assuming it became public on March 20, 2001, the date on the 2000 Annual Report. I have reported the results using the first date but my conclusions do not change if the second date is used.

		Alleged Misrepresentations	Allegation Category[8]
M22	9/4/01	*Platt's* report on asbestos liability.	Asbestos
M23	10/4/01	Halliburton management discussed Halliburton's asbestos liability situation at a Deutsche Bank seminar.	Asbestos
M24	10/23/01	Halliburton reported 3Q01 results and held earnings call.	Asbestos
M25	11/8/01	Halliburton filed its 3Q01 10-Q.	Asbestos

11. The table below summarizes the 13 dates on which the Fund or Ms. Nettesheim alleges a corrective disclosure occurred:

		Alleged Corrective Disclosures	Allegation Category[11]	Source
D1	10/4/99	Halliburton announced sale of Dresser joint ventures and lower-than-expected 3Q99 earnings.	Merger / Unapproved	Nettesheim
D2	1/5/00	Merrill Lynch and Brown Brothers Harriman reduced their earnings per share estimates.	Merger / Unapproved	Nettesheim
D3	10/24/00	Halliburton announced it planned to restructure its Engineering & Construction ("E&C") segment by combining its E&C businesses into one entity.	Merger / Unapproved	Complaint & Nettesheim
D4	12/21/00	Halliburton announced a general negative near-term outlook, E&C restructuring, and a total $120 million after-tax charge related to the E&C restructuring and project losses.	Merger / Unapproved	Complaint & Nettesheim
D5	12/22/00	Alleged continuation of 12/21/00 alleged corrective disclosure.	Merger / Unapproved	Nettesheim
D6	1/30/01	Halliburton announced $193 million pre-tax charge related to E&C restructuring and project losses.	Merger/ Unapproved	Complaint & Nettesheim
D7	6/28/01	Halliburton disclosed that Harbison Walker had asked for financial and asbestos claims management assistance.	Asbestos	Complaint & Nettesheim
D8	8/9/01	Halliburton's 2Q01 10-Q stated that the Company's reported net liability for known open asbestos claims was $124 million.	Asbestos	Nettesheim

[11] *See* footnote 8 for explanation of how the allegations were categorized based on the Complaint.

		Alleged Corrective Disclosures	**Allegation Category[11]**	**Source**
D9	10/30/01	Halliburton announced $21.3 million Mississippi verdict.	Asbestos	Nettesheim
D10	11/1/01	Alleged continuation of 10/30/01 alleged corrective disclosure.	Asbestos	Nettesheim
D11	12/4/01	Halliburton announced Texas judgments.	Asbestos	Complaint & Nettesheim
D12	12/5/01	Alleged continuation of 12/4/01 alleged corrective disclosure.	Asbestos	Nettesheim
D13	12/7/01	Halliburton announced $30 million Maryland verdict.	Asbestos	Complaint & Nettesheim

12. I have previously submitted two reports in this matter—a report dated November 16, 2007, and a supplemental report dated January 18, 2008.

13. The Fund's expert, Ms. Nettesheim, previously submitted two reports in this matter—a report dated September 17, 2007, and a rebuttal report dated December 20, 2007 (collectively, "Nettesheim Reports."). Ms. Nettesheim attempted to establish market efficiency and loss causation using an event study analysis. As discussed in my previous reports, her event study analysis is flawed because (among other things) Ms. Nettesheim used an unreliable method to construct her market model to estimate Halliburton's stock price reactions, and she cherry-picked the alleged corrective disclosure dates by *first* finding dates that she claimed were statistically significant price reactions and *then* trying to find news that according to her was corrective of the alleged misrepresentations.[12]

VI. METHODOLOGY FOR ANALYZING THE PRICE IMPACT OF THE ALLEGED MISREPRESENTATIONS

14. Below is a summary of the methodology used in this report to analyze the price impact of the alleged misrepresentations. Note that the analysis was generally conducted in the order described below, but some parts to the analysis were iterative and/or simultaneous.

[12] Allen Report dated November 16, 2007, pp.7-15; Supplemental Allen Report dated January 18, 2008, pp. 3-5.

15. The first step was to understand the Fund's allegations. In particular, I reviewed the Complaint, the Fund's expert's reports, and the Fund's other pleadings to understand the details of each of the alleged misrepresentations, including for each alleged misrepresentation: 1) when was it allegedly made, 2) what was allegedly false, 3) when was the alleged "truth" purportedly revealed to the market, and 4) with respect to each claimed corrective disclosure, what is alleged to be corrective.

16. There is a lack of clarity and logic to the Fund's claims. For example, the alleged corrective disclosures are not logically linked to the alleged misrepresentations, and the corrective disclosures alleged in the Complaint are different than those alleged by the Fund's expert, Ms. Nettesheim.[13] Between all of the Fund's pleadings and expert reports, the Fund has alleged 25 dates on which misrepresentations occurred and 13 dates on which corrective disclosures occurred. Three dates are alleged as both misrepresentations or corrective disclosures, so overall there are 35 separate dates on which the Fund or Ms. Nettesheim has alleged a misrepresentation and/or a corrective disclosure.

17. The second step was to collect publicly available information regarding Halliburton, its peers, and issues affecting their stock prices during the class period. My team and I collected this information for the class period as well as several months before and after the class period. In particular, for Halliburton and its peers, we collected the following categories of publicly available information commonly used to analyze a company's stock price:

a) Press releases;

b) Conference calls;

c) SEC filings: Publicly traded companies such as Halliburton are required to submit certain forms on a periodic basis to the SEC, including the following:

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13 The Complaint, Ms. Nettesheim, and other pleadings filed by the Fund contend that there were corrective disclosures on different dates. The Complaint alleges 6 corrective disclosure dates while Ms. Nettesheim alleges the corrective information was released on 13 separate corrective disclosure dates. For example, January 5, 2000 is a date that Ms. Nettesheim claims is a corrective disclosure of the alleged misrepresentations regarding the accounting for unapproved claims. Yet, the Complaint makes no mention of this date and there is no mention of the unapproved claims or related issues in any news or announcements on that date.

- Form 10-Ks are submitted annually and provide a detailed description of a company's business and financial condition, and contain audited financial statements;
- Form 10-Qs are submitted quarterly and provide a continuing view of a company's financial position during the year;
- Form 8-Ks are filed periodically to announce major events that occur between quarterly filings;[14]

d) Analyst reports: Analyst reports are typically issued by financial analysts at brokerage firms who perform research and analysis on specific industries and companies. Analysts analyze companies by studying publicly available information, such as SEC filings, as well as participating on conference calls where they can ask questions directly to management. Analysts use this information to model and value companies and industries, using financial techniques such as a discounted cash flow models and valuation multiples. Using these valuations, analysts typically issue price targets (i.e., what price they expect the stock of a company to be in a certain time period) and earnings per share estimates (a company's expected future profits divided by its shares outstanding), and give recommendations to buy, hold or sell the stock. Analysts typically issue reports when new information about the company is released;[15]

e) News stories;[16]

f) Reports by credit rating agencies such as Moody's and S&P;

g) Trade publications, including Mealey's Litigation Reports and RAND reports. Mealey's Litigation Reports provide coverage of litigation and asbestos news.

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[14] *See*, for example, http://www.sec.gov/answers/form10k.htm, http://www.sec.gov/answers/form10Q.htm, and http://www.sec.gov/answers/form8k.htm (Accessed August 2014).

[15] We collected and reviewed all analyst reports on Halliburton during the class period, as well as several months before and after the class period, that were available from Thomson Reuters and Ms. Nettesheim's production.

[16] We reviewed news stories discussing Halliburton downloaded from Factiva, an online news reporting service and archive. We also reviewed news stories that discussed Halliburton using Bloomberg L.P., a commonly used provider of financial data and news, as well as all news stories cited in the Complaint.

RAND reports provide information and analysis on policy issues including asbestos-related issues; and

h) Data on expected future volatility of stock prices.

18. The third step was to review the public information and commentary to understand the following:

- What general market factors were driving Halliburton's stock price;
- With a specific focus on the alleged misrepresentations and the alleged corrective disclosures, what information was publicly known at various points throughout the class period;
- With a specific focus on the alleged misrepresentations, how did analysts and other market commentators interpret publicly known information about the subject of the alleged misrepresentations; and
- With a specific focus on the claimed corrective disclosures, what did analysts and other market commentators consider important and new information at the time of the claimed corrective disclosures.

19. The fourth step was to develop a market model and perform an event study to test whether there was a statistically significant price movement on the dates of the alleged misrepresentations and alleged corrective disclosures, as well as other relevant dates. Academics often use an event study to determine whether and how stock prices respond to new information.[17] An event study is a commonly accepted statistical analysis that measures the movement in a stock's price after an event, typically adjusting for the movement in the overall market and/or industry.[18]

[17] *See*, for example, Craig A. MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. XXXV (March 1997), 13-39; Robert G. Bowman, "Understanding and Conducting Event Studies," *Journal of Business Finance & Accounting*, Vol. 10,4 (1983), 561-584.

[18] *See*, for example, Janet C. Alexander, "The Value of Bad News in Securities Class Actions," *UCLA Law Review*, Vol. 41 (1994), 1421-1469; Daniel R. Fischel, "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," *The Business Lawyer*, Vol. 38 (Nov. 1982), 1-20; Frederick Dunbar & David Tabak, "Materiality and Magnitude: Event Studies in the Courtroom," in *Litigation Services Handbook: The Role of the Financial Expert*, edited by Roman L. Weil, Michael J. Wagner & Peter B. Frank (John Wiley & Sons, Inc., 3rd ed., 2001), ch.19.

20. Using an event study model, I tested the statistical significance of the price reactions following the alleged misrepresentations, the alleged corrective disclosures, and other potentially relevant dates. First, to adjust for movement in Halliburton's industries, I selected an index for each of Halliburton's two main lines of business, which were 1) energy services and 2) engineering and construction ("E&C"). To control for the energy services business, I used the S&P 500 Energy Index. The S&P 500 Energy Index is the index Halliburton compares its stock performance to in its SEC filings.[19] To control for the E&C part of Halliburton's business, I used an E&C index composed of the Fortune 1000 companies classified by Fortune as being in the E&C industry.[20] Fortune includes Halliburton in this list. In addition, I tested whether Halliburton's stock price movement during the class period was explained by an index comprised of companies whose asbestos exposure was discussed by analysts.[21] I found that during the class period the asbestos index did not add further explanatory power to the model beyond that of the energy and E&C indices and thus did not include the asbestos index in the model.[22] *See* Exhibit 2.

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[19] *See*, for example, Halliburton 2006 Form 10-K, filed February 27, 2007, p. 14. Halliburton did not compare its stock performance to any index during the class period in its 10-K filings. Because Halliburton was included in the S&P 500 Energy Index during the class period (according to Bloomberg), we used this index after removing Halliburton from the index.

[20] Fortune 1000 classification as of April 17, 2000. In addition to an E&C index based on the Fortune 1000 classification, I considered E&C indices constructed using analyst reports and financial press issued before and during the class period. Specifically, I considered indices based on a list of E&C companies in Merrill Lynch's March 13, 1998 report titled "Engineering & Construction," as well as a list of E&C companies in Credit Suisse First Boston's November 24, 1999 report titled "The Engineering and Construction Monthly." I also considered the S&P 500 Construction & Engineering Index. *See* the Original Allen Report, section VIII.D, and the Allen Supplemental Report, section V.C.2. The E&C index based on the Fortune 1000 classification was the index with the best fit during the class period. The companies included in this index are those for which price information is available during the class period: Beazer Homes USA, Centex, Champion Enterprises, Clayton Homes, Comfort Systems USA, D.R. Horton, Emcor Group, Foster Wheeler, Granite Construction, Jacobs Engineering Grp., Lennar, MDC Holdings, NVR, Oakwood Homes, Pulte, Ryland Group, Standard Pacific, Stone & Webster, Toll Brothers, U.S. Home, URS, and IT Group. Fluor was excluded because of a spin-off during the class period.

[21] We identified the companies with asbestos exposure in 2001 and 2002 using a search of analyst reports. Specifically, the titles of analyst reports issued in 2001 and 2002 were searched for the word "asbestos." The search was performed across all analyst reports from Thomson Reuters issued about specific companies (rather than, for example, industry reports). Using the list of analyst reports created by this search, we identified the companies about which the reports were issued, focusing on U.S. companies. We excluded companies that did not have stock prices throughout the whole class period and companies that went bankrupt during the class period. This search resulted in the following companies: 3M, Allstate Corporation, American Financial Group, Ashland Inc. (Ashland Oil), Chubb Corporation, CNA Financial Corp., Cooper Industries, Inc., Corning, Inc., Crane Co., Crown Holdings Inc., Dow Chemical Co., Duke Energy, DuPont, Eastman Chemical, Fortune Brands Inc., Georgia-Pacific Group, Goodrich Corp., Goodyear Tire & Rubber, Hartford Financial Services Group Inc., Honeywell International Inc., International Paper Co., McDermott International, Nationwide Financial Services, Owens-Illinois Inc., Pfizer, PPG Industries, Inc., Sealed Air Corp., Travelers Property Casualty Corp., USG Corp., Viacom, Inc., and W.R. Grace & Co. An equal weighted index was constructed using the stock prices of these companies. *See* Section X.A.6.c below for more details.

[22] Note that after the class period, the asbestos index did provide further explanatory power beyond the other two indices. See Exhibit 2.

21. After selecting two indices to control for movements in the industry, I used a statistical analysis called a regression to estimate the relationship between Halliburton's daily stock price returns and the daily returns of the two industry indices.[23] Based on these regression results and the returns of the two indices, the market model predicts Halliburton's stock price movement. This "predicted return" is the portion of Halliburton's stock price return explained by movements in the industry on the date. The difference between Halliburton's actual stock price return and its predicted return is its excess return, or the portion of Halliburton's stock price movement not explained by contemporaneous movements in the industry. I tested the statistical significance of Halliburton's excess stock price movement (or price reaction) following each of the alleged misrepresentations, alleged corrective disclosures, and other potentially relevant dates.

22. When analyzing the statistical significance of a price reaction to an event, the 95% statistical confidence level is the commonly applied standard.[24] Using the 95% confidence level means that there is a 5% chance of finding a statistically significant price reaction even when there is no company-specific news of importance to the market, and the stock price moves solely due to its normal daily fluctuations. In other words, for every 100 price reactions analyzed at the 95% confidence level, on average, 5 will be statistically significant for no reason other than the normal daily variation in the stock price.

23. An issue arises when a large number of price reactions are tested for statistical significance, since the more price reactions that are tested, the greater the probability of finding statistical significance simply due to chance (e.g., when there is no company-specific news of importance to the market). This issue is known in statistics as "multiple comparisons." As one popular scientific publication explains, "Many scientific papers make 20 or 40 or even hundreds of comparisons." In such instances, researchers "are *virtually guaranteed* to find statistical

[23] Regression analysis is used to estimate the relationship between two or more variables. The regression estimation period used in the event study is the class period, excluding the days of the alleged misrepresentations and alleged corrective disclosures.

[24] The 95% level is the level most commonly applied by courts and academics to test statistical significance. For a discussion of confidence levels, *see*, for example, David H. Kaye & David A. Freedman, "Reference Guide on Statistics," *Reference Manual on Scientific Evidence*, (Federal Judicial Center, 3rd ed., 2011), 243-246; Franklin M. Fisher, "Multiple Regression in Legal Proceedings," 80 *Columbia Law Review* 702 (1980), 717.

significance [at the 95% confidence level] in results that are *meaningless statistical flukes*."[25] Textbooks and other academic sources describe the issue of multiple comparisons similarly: when multiple tests of statistical significance are done without any adjustment, finding a spurious statistically significant result is not surprising.[26]

24. As an illustrative example, imagine rolling a 20-sided die with 19 white sides and 1 red side. If the die is rolled once, it would be surprising if the die landed red-side up since the likelihood of this occurring is only 5% (1 out of 20). However, if the die is rolled 100 times, it would be much less surprising that the die landed red-side up 1 time since, on average, the die should land red-side up 5 times for every 100 rolls.

25. The problem of multiple comparisons is particularly relevant in this case because the Fund and its expert, Ms. Nettesheim, have asserted a total of 35 dates on which the alleged fraud either inflated the stock price because of an alleged misrepresentation or deflated the stock price because of an alleged corrective disclosure.[27] This means that there are 35 price reactions being tested for statistical significance, each with a 5% chance of being statistically significant simply as a result of normal fluctuations in the stock price (assuming the 95% confidence level is used). Given the number of tests performed, it would not be surprising to find a statistically significant result even when there is no company-specific news of importance to the market.[28]

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[25] Charles Seife, "The Mind-Reading Salmon," *Scientific American*, Aug. 2011, 30 (emphasis added). The article goes on to provide the example of neuroscientists who presented a salmon with pictures of people expressing emotions and found that certain regions of the fish's brain lit up when certain types of pictures were shown. The result was statistically significant at the 99.9% confidence level. Yet, as the neuroscientists pointed out, "there are so many possible patterns that a statistically significant result was virtually guaranteed, so the result was totally worthless." Further emphasizing the meaningless result is the fact that the fish was dead. *Id.*

[26] *See*, for example, John A. Rice, *Mathematical Statistics and Data Analysis,* (3rd ed.), 458 ("Suppose that 100 independent two-sample t tests are conducted at the .05 level and that, in fact, all the null hypotheses are true. We would expect that five of the tests would produce a 'significant' result."); "Reference Guide to Statistics," *Reference Manual on Scientific Evidence*, (Federal Judicial Center, 3rd ed., 2011), 290 ("[M]ultiple comparison. Making several statistical tests on the same data set. Multiple comparisons complicate the interpretation of a p value. For example, if 20 divisions of a company are examined, and one division is found to have a disparity 'significant' at the 0.05 level, the result is not surprising; indeed, it should be expected under the null hypothesis."). *See also* Peter C. Austin et al., "Testing multiple statistical hypotheses resulted in spurious associations: a study of astrological signs and health," *Journal of Clinical Epidemiology* 59 (2006), 964-969; Hervé Abdi, "Bonferroni test" in *Encyclopedia of Measurement and Statistics*, edited by Neil J. Salkind (Sage, 2007), 103-107; David Tabak "Multiple Comparisons and the Known or Potential Error Rate," *Journal of Forensic Economics* 19(2), 2006, 231-236.

[27] The Fund has alleged 25 dates on which alleged misrepresentations occurred and 13 dates on which alleged corrective disclosures occurred, including 3 dates with both an alleged misrepresentation and alleged corrective disclosure.

[28] The multiple comparison problem is exacerbated because Ms. Nettesheim added to the list of alleged corrective disclosures using an unscientific procedure of *first* testing the statistical significance of Halliburton's price reaction on each of the 633 days during the class period and *then* attempting to determine whether, in her view, any of the statistically significant price reactions related to any of the alleged misrepresentations. (Nettesheim Report, ¶¶41-45.)

26. A commonly accepted method to correct for the multiple comparisons problem is the Bonferroni adjustment.[29] The Bonferroni adjustment is based on the number of tests performed so that the overall statistical significance takes into account the number of tests performed and adjusts the statistical threshold of individual tests accordingly.[30] In this report, statistical significance is discussed both before and after adjusting for multiple comparisons. For all days on which Halliburton's stock price reaction is tested, the multiple comparisons adjustment assumes there were 35 multiple comparisons.[31]

27. The fifth and final step of my analysis involved using the information and analyses described above to examine whether there is any evidence that the alleged misrepresentations impacted the price of Halliburton's stock. The focus of this report is on the main allegations but also includes an exhaustive and detailed price impact analysis of all the alleged misrepresentations mentioned in the Complaint and the Nettesheim Reports. This report also includes an analysis of all alleged corrective disclosures for evidence of price impact of the alleged misrepresentations.

VII. THERE WAS NO STATISTICALLY SIGNIFICANT POSITIVE PRICE REACTION AFTER ANY OF THE ALLEGED MISREPRESENTATIONS

28. The Complaint alleges 25 dates on which Halliburton made misrepresentations that purportedly inflated its stock price. Three of the dates are alleged by the Fund to be both misrepresentations and corrective disclosures. I analyzed the price reactions after all 25 alleged misrepresentation dates using the event study described in the section above. I found that there was no statistically significant price reaction after any of the alleged misrepresentations after making the appropriate adjustment for multiple comparisons. Even before making such adjustment, there was only one date with statistically significant positive movement: April 25, 2001, on which the Fund alleges Halliburton misrepresented its first quarter 2001

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29 For example, in discussing the issue of multiple comparisons, the *Encyclopedia of Measurement and Statistics* discusses two methods: the Bonferroni and the Sidak adjustment. *See* Hervé Abdi, "Bonferroni test" in *Encyclopedia of Measurement and Statistics*, edited by Neil J. Salkind (Sage, 2007), 103-107. As an alternative, I have tested the price reactions discussed in this report, using the Sidak adjustment in place of the Bonferroni adjustment and my conclusions do not change.

30 *See,* for example, details on the Bonferroni adjustment in Hervé Abdi, "Bonferroni test" in *Encyclopedia of Measurement and Statistics*, edited by Neil J. Salkind (Sage, 2007), 103-107.

31 35 is the total number of dates on which alleged misrepresentations and/or alleged corrective disclosures occurred. (In addition, when the date tested is merely the result of Ms. Nettesheim's unscientific procedure, a second Bonferroni adjustment is discussed that corrects for the 633 multiple comparisons that Ms. Nettesheim performed to arrive at her list of alleged corrective disclosures.)

earnings.[32] The Complaint does not include any allegation that Halliburton made any misstatement discussing asbestos on that day and as discussed in section X below, I found no evidence of price impact.

29. Moreover, after making the appropriate adjustment for 35 multiple comparisons, there was no statistically significant price reaction following the April 25, 2001 alleged misrepresentation. Thus, I found, after appropriately adjusting for multiple comparisons, that there was no statistically significant positive price reaction after any of the alleged misrepresentations. The lack of statistically significant positive price reactions after the alleged misrepresentations does not support the Fund's claim of price impact.

30. The following table summarizes the results of the event study for the 25 dates on which an alleged misrepresentation occurred (before and after adjusting for 35 multiple comparisons).

				Positive and Statistically Significant?[33]	
Alleged Misrepresentations			**Allegation Category[34]**	**Before MC Adjustment**	**After MC Adjustment[35]**
M1	7/22/99	Halliburton reported 2Q99 results and held earnings call.	All	No	No
M2	8/13/99	Halliburton filed its 2Q99 10-Q.	All	No	No
M3	9/13/99	Halliburton presented at Dain Rauscher Wessels conference.	All	No	No
M4	10/21/99	Halliburton reported 3Q99 results and held earnings call.	All	No	No
M5	11/15/99	Halliburton filed its 3Q99 10-Q.	All	No	No
M6	1/27/00	Halliburton reported 4Q99 results and held earnings call.	All	No	No

32 Complaint, ¶161.

33 Price reaction is positive and statistically significantly at the 5% level.

34 *See* footnote 8 for explanation of how the alleged misrepresentations were categorized based on the Complaint.

35 Adjusted for 35 multiple comparisons, based on the number of dates tested given the Fund's alleged misrepresentation and alleged corrective disclosure dates.

Alleged Misrepresentations			Allegation Category[34]	Positive and Statistically Significant?[33] Before MC Adjustment	After MC Adjustment[35]
M7	3/14/00[36]	Halliburton issued its 1999 Annual Report.	All	No	No
M8	4/26/00	Halliburton reported 1Q00 results and held earnings call.	All	No	No
M9	5/15/00	Halliburton filed its 1Q00 10-Q.	All	No	No
M10	7/26/00	Halliburton reported 2Q00 results and held earnings call.	All	No	No
M11	8/10/00	Halliburton filed its 2Q00 10-Q.	All	No	No
M12	11/9/00	Halliburton filed its 3Q00 10-Q.	All	No	No
M13	1/30/01	Halliburton reported 4Q00 results and held earnings call.	Asbestos	No	No
M14	3/27/01[37]	Halliburton issued its 2000 Annual Report.	Asbestos	No	No
M15	4/25/01	Halliburton reported 1Q01 results.	Asbestos	Yes	No
M16	5/11/01	Halliburton filed its 1Q01 10-Q.	Asbestos	No	No
M17	5/25/01	Robinson-Humphrey issued report after discussion with Halliburton management.	Asbestos	No	No
M18	6/28/01	Halliburton announced Harbison-Walker claims could require an additional reserve of $60 million.	Asbestos	No	No
M19	7/25/01	Halliburton reported 2Q01 results and held earnings call.	Asbestos	No	No
M20	8/9/01	Halliburton filed its 2Q01 10-Q.	Asbestos	No	No

[36] *See* footnote 9.

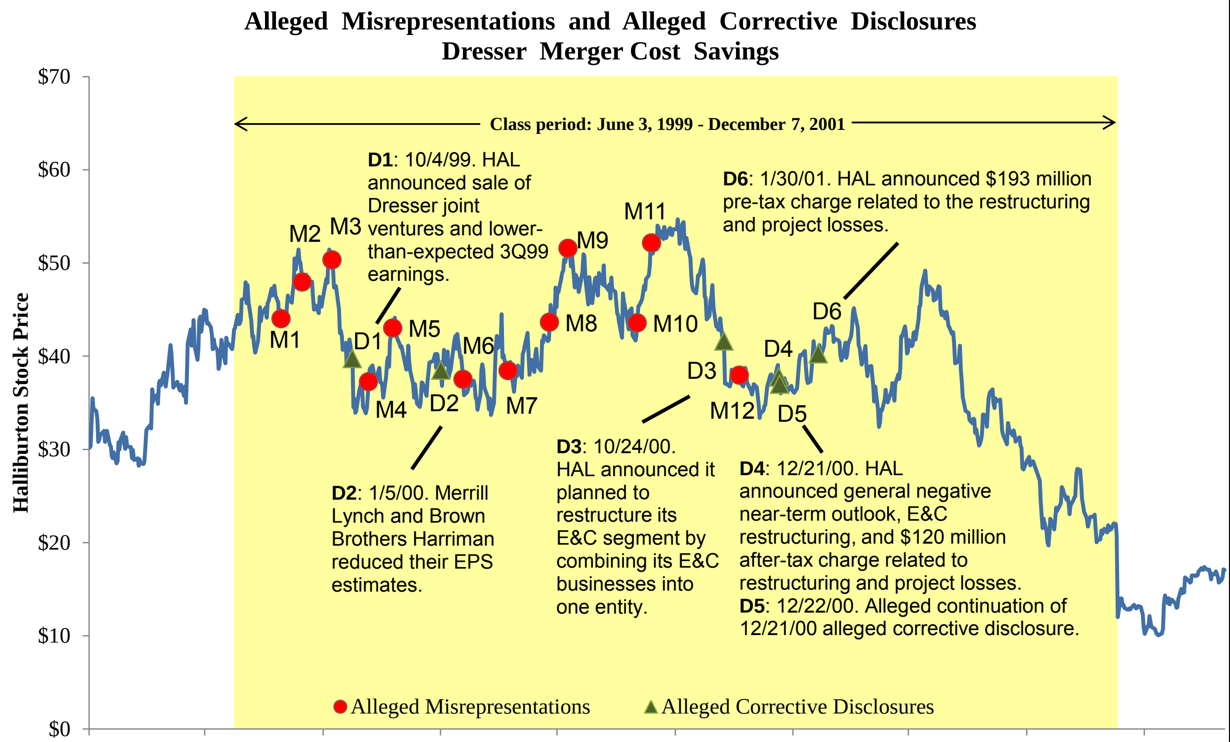
[37] *See* footnote 10.

				Positive and Statistically Significant?[33]	
		Alleged Misrepresentations	**Allegation Category[34]**	**Before MC Adjustment**	**After MC Adjustment[35]**
M21	8/22/01	Salomon Smith Barney, after discussions with Halliburton management, issued a report on Halliburton's asbestos exposure.	Asbestos	No	No
M22	9/4/01	*Platt's* report on asbestos liability.	Asbestos	No	No
M23	10/4/01	Halliburton management discussed Halliburton's asbestos liability situation at a Deutsche Bank seminar.	Asbestos	No	No
M24	10/23/01	Halliburton reported 3Q01 results and held earnings call.	Asbestos	No	No
M25	11/8/01	Halliburton filed its 3Q01 10-Q.	Asbestos	No	No

VIII. THE ALLEGED MISREPRESENTATIONS REGARDING THE COST SAVINGS FROM THE DRESSER MERGER DID NOT IMPACT HALLIBURTON'S STOCK

31. The Fund alleges that the Company misrepresented the cost savings resulting from the Dresser merger, which caused Halliburton's stock to trade at inflated prices during the class period. In particular, the Fund claims that during the class period, the Company falsely stated that cost savings from the merger were expected to be approximately $500 million and that the merger was "behind us."[38] According to the Fund, the truth about the cost savings from the merger was revealed to the market over a series of partial corrective disclosures, causing the stock price to decline. The chart below shows Halliburton's stock price along with the Fund's alleged misrepresentations and alleged corrective disclosures regarding the cost savings from the Dresser merger:

[38] Complaint, ¶¶110, 115, 121, 122.



Notes and Sources:
Price data collected from Factset Research Systems, Inc.
Alleged misrepresentations and alleged corrective disclosures aggregated from the Complaint and the Nettesheim reports.

32. The Complaint alleges Halliburton made misrepresentations regarding the cost savings from the merger on 12 dates, as summarized in the table below.[39] However, only 4 of these dates (M1, M3, M6 and M7 in the table below) contain any specific alleged misrepresentations regarding the cost savings from merger.[40] As discussed above, there was no statistically significant price reaction after any of the alleged misrepresentations.

Alleged Misrepresentations - Dresser Merger		
M1	7/22/99	Halliburton reported 2Q99 results and held earnings call. On 7/23/99, Dain Rauscher Wessels stated, "Management expects that annualized merger costs savings are approximately $500 million."
M2	8/13/99	Halliburton filed its 2Q99 10-Q.

[39] Complaint, ¶¶108-154.

[40] Complaint, ¶¶110, 115, 121-122.

Alleged Misrepresentations - Dresser Merger		
M3	9/13/99	After a presentation by Halliburton management, Dain Rauscher Wessels reported, "[T]he company is now projecting annual benefits of $500 million."
M4	10/21/99	Halliburton reported 3Q99 results and held earnings call.
M5	11/15/99	Halliburton filed its 3Q99 10-Q.
M6	1/27/00	Halliburton reported 4Q99 results and held earnings call. On 1/28/00, Morgan Stanley issued a report saying, "Cost Savings are Real."
M7	3/14/00[41]	Halliburton's 1999 Annual Report included a letter that stated, "The merger with Dresser Industries is now behind us."
M8	4/26/00	Halliburton reported 1Q00 results and held earnings call.
M9	5/15/00	Halliburton filed its 1Q00 10-Q.
M10	7/26/00	Halliburton reported 2Q00 results and held earnings call.
M11	8/10/00	Halliburton filed its 2Q00 10-Q.
M12	11/9/00	Halliburton filed its 3Q00 10-Q.

33. According to the Fund, the truth about the cost savings from the Dresser merger emerged over partial corrective disclosures on six dates: October 4, 1999; January 5, 2000; October 24, 2000; December 21-22, 2000; and January 30, 2001.[42] The table below summarizes the six alleged corrective disclosure dates, of which only three were alleged in the Complaint.[43] The Fund's expert, Ms. Nettesheim, added three additional dates after her procedure of *first* searching for statistically significant price reactions across all 633 days during the class period and *then* attempting to relate the statistically significant price reactions to alleged misrepresentations.[44]

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[41] *See* footnote 9.

[42] Complaint, ¶¶144, 150, 155; Nettesheim Report, ¶¶84-112, including footnote 71 on page 51.

[43] Complaint, ¶¶144, 150, 155.

[44] Nettesheim Report, ¶¶41-45, 84-112, including footnote 71 on page 51.

		Alleged Corrective Disclosures – Dresser Merger	Source
D1	10/4/99	Halliburton announced sale of Dresser joint ventures and lower-than-expected 3Q99 earnings.	Nettesheim
D2	1/5/00	Merrill Lynch and Brown Brothers Harriman reduced their earnings per share estimates.	Nettesheim
D3	10/24/00	Halliburton announced it planned to restructure its E&C segment by combining its E&C businesses into one entity.	Complaint & Nettesheim
D4	12/21/00	Halliburton announced a general negative near-term outlook, E&C restructuring, and a total $120 million after-tax charge related to the E&C restructuring and project losses.	Complaint & Nettesheim
D5	12/22/00	Alleged continuation of 12/21/00 alleged corrective disclosure.	Nettesheim
D6	1/30/01	Halliburton announced a $193 million pre-tax charge related to the E&C restructuring and project losses.	Complaint & Nettesheim

34. As discussed in the sections below, there was no price impact from the alleged misrepresentations during the class period regarding the cost savings from the Dresser merger. The alleged misrepresentations did not contain new information regarding the cost savings from the merger, and the market did not interpret the alleged misrepresentations as containing new information regarding cost savings. Moreover, the disclosures that the Fund alleges were corrective of the Company's misrepresentations were not, in fact, corrective, and thus provide no evidence of price impact.

35. In addition, there were no statistically significant price reactions after the following alleged corrective disclosures:

- 01/05/2000 (after making the appropriate adjustment for multiple comparisons);
- 12/21/2000 (both before and after making the appropriate adjustment for multiple comparisons);
- 12/22/2000 (after making the appropriate adjustment for multiple comparisons); and
- 01/30/2001 (both before and after making the appropriate adjustment for multiple comparisons).

A. The alleged misrepresentations during the class period regarding cost savings from the Dresser merger did not impact Halliburton's stock price because they contained no new information regarding the cost savings

36. The table below summarizes the Company's statements regarding its estimated cost savings from the Dresser merger before and during the class period.

Halliburton Statements Regarding Cost Savings From Dresser Merger

		← Class Period Statements				→
10/1/1998 *After Closing of Merger*	**4/26/1999** *1Q99 Earnings Call*	**7/22/1999** *2Q99 Earnings Call*	**9/13/1999** *Dain Rauscher Conference*	**10/21/1999** *3Q99 Earnings Call*	**1/27/2000** *4Q99 Earnings Call*	**3/14/2000** *1999 10-K & Annual Report*
• "at least $250 million per year in annual savings by virtue of the merger"	• "upwards of $500 million worth of merger-related savings"	• "total cost reductions and synergies from the merger […] now exceed $500 million on an annualized basis"	• "the company is now projecting annual benefits of $500 million"			• "we will ultimately reduce our costs by an estimated $500 million on an annual basis"
	• "we're basically ahead of plan"	• "on or ahead of schedule"		• "essentially complete and behind us"	• "pretty much have those behind us"	• "merger with Dresser Industries is now behind us"
• "initial headcount reductions […] related to the merger […] are going to be about 7500 people"	• "headcount reductions of approximately 10,850"	• "original plan of about 10,850 severance reductions"	• "further headcount reductions"			• "planned headcount reductions of over 10,000"

Halliburton Statements Regarding Cost Savings From Dresser Merger

← Class Period Statements →

10/1/1998 *After Closing of Merger*	**4/26/1999** *1Q99 Earnings Call*	**7/22/1999** *2Q99 Earnings Call*	**9/13/1999** *Dain Rauscher Conference*	**10/21/1999** *3Q99 Earnings Call*	**1/27/2000** *4Q99 Earnings Call*	**3/14/2000** *1999 10-K & Annual Report*
• "2600 have been actioned in the third quarter of this year"	• "completed about 85% of those planned reductions"	• "about 1,400 of those in our plan to go [or about 87% completed]"		• "substantially completed our planned head count reductions related to the merger"	• "headcount […] declined about 13,000 […] from where we were in the fourth quarter of 1998"	• "headcount reductions of 13,000 were achieved during 1999"
• "we're looking at closing and consolidating over 400 locations"	• "on schedule to close over 400 properties"	• "400 facilities to be closed" • "in addition to […] the merger plan […] closing 100 additional properties […] 80 of which have been vacated"	• "significant facility consolidations"	• "Initially we thought we were going to close about 400" • "Because of the industry downturn and additional opportunities […] we have in fact identified 500 facilities"	• "our plans were to close 500 facilities"	• "program to exit approximately 500 properties"
	• "approximately 270 properties [or about 68% of 400] have been vacated"	• "270 of these have been vacated"		• "80% of these we have already exited"	• "88% of those are closed and exited"	• "have vacated 452 of the approximate 500 total facilities [or 90%]"

37. After the closing of the merger in October 1998, the Company announced that it expected at least $250 million in cost savings by virtue of the Dresser merger. In April 26, 1999, three months before the beginning of the class period, the Company announced upwards of $500 million of merger-related savings.

1. Before the class period, the Company announced that it expected $500 million in cost savings related to the merger and numerous analysts repeated the Company's expectations

Pre-Class Period Statements	Alleged Misrepresentation
[I]t's fair to say that we're now seeing [cost savings] that are much higher than we initially indicated, and that that number could be, you know, upwards of $500 million worth of merger-related savings. [Halliburton Conference Call, 4/26/1999] Revised estimates of the merger consolidation savings have increased to $500 million. [Salomon Smith Barney, 4/27/1999] Management expects to realize more than $500 million of cost savings from the Dresser merger. [First Union, 4/27/1999] Substantial cost savings from the Dresser merger and downsizing ($500MM +) sets the stage for strong margin improvement during the recovery. [Donaldson, Lufkin & Jenrette, 5/4/1999]	Management expects approximately $500 million in cost savings from the Dresser merger.

38. On April 26, 1999, three months before the class period began, the Company announced that cost savings specifically related to the merger were "higher than we initially indicated" and "upwards of $500 million":

> I think it's fair to say that we're now seeing numbers that are much higher than we initially indicated, and that that number could be, you know, **upwards of $500 million worth of merger-related savings coming from 1999, despite the fact that the revenue base will be down**. [Halliburton Conference Call, 4/26/1999, emphasis added]

39. In late April and early May of 1999 (also before the class period), multiple analysts reiterated Halliburton's statements regarding the expected $500 million in savings:

> Revised estimates of the merger consolidation savings have increased to $500m […] [Salomon Smith Barney, 4/27/1999, repeated on 5/4/1999]
>
> Management expects to realize more than $500 million of cost savings from the Dresser merger, although progress-to-date has been masked by market weakness. [First Union, 4/27/1999]
>
> Substantial cost savings from the Dresser merger and downsizing ($500MM +) sets the stage for strong margin improvement during the recovery. [Donaldson, Lufkin & Jenrette, 5/4/1999]

40. As the Company and analyst statements demonstrate, the expectation of $500 million in merger-related cost savings was disclosed to and known by the market before the class period commenced on June 3, 1999.

2. The Company was clear that the expected benefit of $250 million (and later $500 million) from the Dresser merger related to expected cost savings rather than revenue enhancements

41. At the time that the merger closed in 1998, the Company made clear that the $250 million expected benefit from the Dresser merger referred to expected cost savings rather than revenue enhancements from the merger. The Company stated in its October 1, 1998, conference call with analysts:

> And lastly, the cost reductions, and there are enormous cost reductions that are going to come out of this merger that we executed yesterday. And I think that **even though we are not going to get any help on the revenue side, we will be able to execute on the cost reduction side.** And those numbers will drop to the bottom line. [Halliburton Conference Call, 10/1/1998, emphasis added]

42. Particularly, the cost reductions were focused on consolidating facilities and reducing headcount. The Company elaborated in its conference call with analysts that it was "looking at closing and consolidating over 400 locations around the world." The Company also stated that it was initially targeting over 7,500 in headcount reductions "on first pass."[45]

43. Similarly, when the Company increased the expected benefits of the Dresser merger to $500 million, it made clear that the $500 million referred to expected cost savings. The Company stated in its April 26, 1999, conference call:

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[45] Halliburton Conference Call, October 1, 1998. On its conference call on January 25, 1999, the Company identified additional headcount reductions. Halliburton Conference Call, January 25, 1999 ("We also have another 3,350 people that will come out of our various overhead shared services and downstream operations.")

> I think it's fair to say that we're now seeing numbers that are much higher than we initially indicated, and that that number could be, you know, **upwards of $500 million worth of merger-related savings coming from 1999, despite the fact that the revenue base will be down**. [Halliburton Conference Call, 4/26/1999, emphasis added]

3. The Company disclosed before the start of the class period that the cost-reduction measures announced at the time of merger had been substantially achieved

44. Before the beginning of the class period, the Company disclosed that most of the cost-saving measures announced at the time of the merger—including the stated headcount reductions and facility closures—had been achieved. Specifically, the Company noted that it had completed a vast majority of its stated headcount reductions, vacated 270 properties, and was "on schedule" to close over 400 facilities as previously announced.

> Since the merger, **approximately 270 properties have been vacated,** of which over 60 have been returned to the owner. We are **still on schedule to close over 400 facilities**, as we previously discussed […]
>
> The **total announced headcount reductions of approximately 10,850**, most of which are included in the Energy Services Group […] Overall, the company has **completed about 85% of those planned reductions in headcounts.** [Halliburton Conference Call, 4/26/1999, emphasis added]

45. Thus, not only was the expectation of $500 million in merger-related cost savings not new information by the beginning of the class period, the cost-saving measures that the Company expected to result in $500 million of savings—including the headcount reductions and facility closures—had already been substantially achieved.

4. Because subsequent alleged misrepresentations made during the class period did not contain new information regarding cost savings from the merger or indicate that the cost-reduction measures had not been achieved, these alleged misrepresentations had no price impact

46. Subsequent statements made by the Company during the class period, which the Fund claims were misrepresentations regarding the cost savings from the merger, contained no new information with respect to such cost savings. These alleged misrepresentations had no impact on Halliburton's stock price because, as the Fund has concluded, Halliburton's stock traded in an efficient market over the class period, and in an efficient market only new information impacts the stock price. According to finance theory, the market for a security is

said to be efficient if the price of the security fully and rapidly incorporates new information.[46] Similarly, the Fund's expert, Ms. Nettesheim, points out that a stock trading in an efficient market reacts to new and material information, and therefore, "successive announcements of the same information will have no additional effect on share price."[47] Given the Fund's conclusion of market efficiency, alleged misrepresentations during the class period containing no new information could have no impact on Halliburton's stock price.

47. The Fund alleges four specific misrepresentations during the class period with respect to the cost savings from the Dresser merger. On July 23, 1999, after Halliburton's 2Q99 earnings call, analysts at Dain Rauscher Wessels stated, "Management expects that annualized merger cost savings are approximately $500 million."[48] Likewise, on September 14, 1999, analysts at Dain Rauscher Wessels again stated that "the company is now projecting annual benefits of $500 million" from the merger.[49] On January 28, 2000, after the Company's 4Q99 earnings call, analysts at Morgan Stanley stated, "Cost Savings are Real."[50] In its 1999 Annual Report, after additional headcount reductions and facility closures had been accomplished, Halliburton characterized the merger as "behind us."[51]

48. As shown in the table of Company statements above, these alleged misrepresentations contained no new information with regard to the cost savings from the merger that was not already disclosed before the beginning of the class period. In an efficient market, these alleged misrepresentations could have had no impact on Halliburton's stock price during the class period.

a. The alleged misrepresentations on July 22, 1999 that the merger was ahead of schedule and cost savings were approximately $500 million was not new information

49. According to the Fund, on July 22, 1999, during its 2Q99 earnings call, the Company allegedly misrepresented that the merger was "on or ahead of schedule" and that

46 *See*, for example, Richard A. Brealey, Stewart C. Myers & Franklin Allen, *Principles of Corporate Finance*, (McGraw-Hill: New York, 11th ed., 2014), 321-341.

47 Nettesheim Report, ¶40.

48 Complaint, ¶110; Dain Rauscher Wessels, July 23, 1999.

49 Complaint, ¶115; Dain Rauscher Wessels, September 14, 1999.

50 Complaint, ¶121; Morgan Stanley, January 28, 2000.

51 Complaint, ¶122; Halliburton 1999 Annual Report, p.2.

merger-related savings would be approximately $500 million annually. The Fund points to a Dain Rauscher Wessels report released on July 23, 1999, based on management's statements made during the Company's 2Q99 earnings call.[52] The Dain Rauscher Wessels report stated:

> The merger results from the Halliburton-Dresser merger are on or ahead of schedule…. Management [now] expects that annualized merger cost savings are approximately $500 million. [Dain Rauscher Wessels, 7/23/1999, cited in Complaint, ¶110]

50. Yet, in an efficient market there can be no price impact from this alleged misrepresentation because the Company had *already* stated on April 26, 1999—over a month before the beginning of the class period—that the merger was ahead of plan in terms of the announced headcount reductions and facility closures, and that the cost savings were approximately $500 million.[53]

51. The July 23, 1999 Dain Rauscher Wessels analyst report was also not the first analyst report to note that Halliburton was projecting $500 million in merger-related savings. For example, in late April and early May of 1999, analysts stated that "[r]evised estimates of the merger consolidation savings have increased to $500m,"[54] and that "[m]anagement expects to realize more than $500 million of cost savings from the Dresser merger."[55]

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52 Complaint, ¶¶109-110.

53 Halliburton Conference Call, April 26, 1999 ("Basically, if you look at the plan that we put in place last September to effect the merger of (Dresser) and Halliburton, **in terms of facility closures and headcount reductions we're basically ahead of plan** that we had in place at that point in time, due because of the market conditions that are out there […] But I think it's fair to say that we're now seeing numbers that are much higher than we initially indicated, and that that number could be, you know, **upwards of $500 million worth of merger-related savings** coming from 1999, despite the fact that the revenue base will be down.") (emphasis added).

54 Salomon Smith Barney, April 27, 1999. Salomon Smith Barney repeated this statement in its May 4, 1999 report.

55 First Union, April 27, 1999.

b. The alleged misrepresentation on September 13, 1999 that the company was projecting $500 million of cost savings from the merger was not new information

52. The Fund alleges that on September 13, 1999, at a Dain Rauscher Wessels conference, the Company again misrepresented that cost savings from the merger would be $500 million.[56] There can be no price impact from this alleged misrepresentation because the Company was confirming *the same information* disclosed in its April 1999 earnings call[57] and repeated by analysts in late April and early May of 1999.[58]

c. The alleged misrepresentation on January 27, 2000 about cost savings from the merger was not new information

53. According to the Fund, on January 28, 2000 (after the Company's January 27 earnings call) Morgan Stanley released a report based on statements made during the call.[59] This report stated:

> Cost Savings are Real
> Regarding the cost savings issue, management continues to stress that costs have been permanently reduced in-line with prior guidance, and the company's revenue potential cycle-over-cycle has not changed… [Morgan Stanley, 1/28/2000, cited in Complaint, ¶121]

54. There can be no price impact from this alleged misrepresentation because the Company was reiterating the same information from its April 1999 earnings call, when it reported that the cost saving measures announced at the time of the merger had been substantially achieved.[60]

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56 Complaint, ¶115. On September 14, 1999, Dain Rauscher Wessels stated, "Management originally targeted cost savings and related synergies from the Dresser merger totaling $250 million per annum, but following further headcount reductions and significant facility consolidations, the company is now projecting annual benefits of $500 million."

57 Halliburton Conference Call, April 26, 1999 ("But I think it's fair to say that we're now seeing numbers that are much higher than we initially indicated, and that that number could be, you know, **upwards of $500 million worth of merger-related savings** coming from 1999, despite the fact that the revenue base will be down.") (emphasis added).

58 Salomon Smith Barney, April 27, 1999, repeated on May 4, 1999 ("Revised estimates of the merger consolidation savings have increased to $500m […]"); First Union, April 27, 1999 ("Management expects to realize more than $500 million of cost savings from the Dresser merger, although progress-to-date has been masked by market weakness."); Donaldson, Lufkin & Jenrette, May 4, 1999 ("Substantial cost savings from the Dresser merger and downsizing ($500MM +) sets the stage for strong margin improvement during the recovery.").

59 Complaint, ¶121.

60 Halliburton Conference Call, April 26, 1999 ("Since the merger, **approximately 270 properties have been vacated,** of which over 60 have been returned to the owner. We are **still on schedule to close over 400 facilities**, as we previously discussed […] The **total announced headcount reductions of approximately 10,850**, most of which are included in the

d. The alleged misrepresentation in the 1999 Annual Report that the merger was "behind" the Company was not new information

55. The Fund alleges that the Company's 1999 Annual Report in April 2000 falsely stated that the merger was now behind the Company:

> The merger with Dresser Industries is now behind us. Integrating the operations of the two companies … [has] been an important part of our transition to the future… [1999 Shareholder Annual Report, cited in Complaint, ¶122]

56. Yet, this alleged misrepresentation contained no new information since the Company had stated in October 1999, on its 3Q99 earnings call, that the merger was "essentially complete and behind us."[61] The statement that the merger was "essentially complete and behind us" specifically related to the cost-saving measures announced at the time of the merger, including the headcount reductions and facility closures, which the Company stated on its April 1999 earnings call—before the start of the class period—had substantially been achieved.[62]

57. In short, the alleged misrepresentations during the class period did not contain new information about the cost savings from the merger. The expectation of $500 million in merger-related cost savings was known to the market before the class period, and before the start of the class period, the Company disclosed that the cost-saving measures, including the headcount reductions and facility closures, had been substantially achieved. Subsequent statements made by the Company during the class period did not contain new information regarding the cost savings from the merger or indicate that the cost-saving reductions had not been achieved. In an efficient market, where "successive announcements of the same

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Energy Services Group […] Overall, the company has **completed about 85% of those planned reductions in headcounts.**") (emphasis added).

[61] Halliburton Conference Call, October 21, 1999 ("In terms of the merger, we are now a year past the consummation of the Dresser merger. Our integration efforts are **essentially complete and behind us** at this point in time. In terms of our cost reduction efforts, we have closed over 500 facilities. Initially we thought we were going to close about 400. Because of the industry downturn and additional opportunities that we saw, we have in fact identified 500 facilities that will be closed. About 80% of these we have already exited. And we have disposed and returned to the owner, and essentially have gotten off our books over 50% of them at this point in time. In the third quarter, we **exited an additional 52, and disposed of 69 of these facilities**. In addition, we have **substantially completed our planned head count reductions** related to the merger.") (emphasis added).

[62] Halliburton Conference Call, April 26, 1999 ("Since the merger, **approximately 270 properties have been vacated,** of which over 60 have been returned to the owner. We are **still on schedule to close over 400 facilities**, as we previously discussed […] The **total announced headcount reductions of approximately 10,850**, most of which are included in the Energy Services Group […] Overall, the company has **completed about 85% of those planned reductions in headcounts.**") (emphasis added).

information will have no additional effect on share price,"[63] the alleged misrepresentations during the class period could have had no price impact.

B. The alleged partial corrective disclosures provide no evidence of price impact from the alleged misrepresentations because they were not corrective of any alleged misrepresentation regarding the cost savings from the Dresser merger

58. The Fund claims that news correcting Halliburton's alleged misrepresentations regarding the cost savings from the Dresser merger was disclosed on October 4, 1999, January 5, 2000, October 24, 2000, December 21-22, 2000, and January 30, 2001.[64] Contrary to the Fund's claims, these alleged corrective disclosures were not, in fact, corrective of Halliburton's alleged misrepresentations regarding the cost savings from the Dresser merger. Moreover, they did not reveal any information to the market with respect to the alleged misrepresentations. These alleged corrective disclosures provide no evidence of price impact from the alleged misrepresentations.

1. The October 4, 1999 alleged corrective disclosure—when the Company announced it was selling two joint ventures and preannounced lower 3Q earnings—was not corrective of any alleged misrepresentation regarding cost savings from the Dresser merger and thus provides no evidence of price impact

Alleged Misrepresentation	**Alleged Corrective Disclosure**
Management expects approximately $500 million in cost savings from the Dresser merger.	Halliburton planned to sell two joint ventures in which Dresser had participated and preannounced lower 3Q99 earnings.

59. The Complaint does not allege October 4, 1999 as a corrective disclosure date. This date was added by the Fund's expert, Ms. Nettesheim, after her unscientific procedure of *first* searching for statistically significant price reactions across all 633 days during the class period and *then* attempting to relate the statistically significant price reactions to alleged misrepresentations.[65]

63 Nettesheim Report, ¶40.

64 Complaint, ¶¶144, 150, 155; Nettesheim Report, ¶¶84-112, including footnote 71 on page 51.

65 Nettesheim Report, ¶¶41-45, 84-87.

60. On October 4, 1999, Halliburton reported several developments: first, that Halliburton planned to sell its interests in two joint ventures—Dresser-Rand and Ingersoll-Dresser Pump—to Ingersoll-Rand Company;[66] second, that the Dresser Equipment Group was experiencing lower-than-expected profits;[67] third, that Halliburton's Energy Services Group anticipated being negatively affected by "continued low spending;"[68] and finally, that a decline in the downstream E&C business would impact third quarter earnings.[69] The alleged corrective disclosure on October 4, 1999, was not corrective of any alleged misrepresentation regarding cost savings from the Dresser merger for at least four reasons.

61. First, Halliburton's October 4 press release did not discuss cost savings from the Dresser merger, and no analyst report in the days following the release interpreted it as an indication that merger-related cost savings had not been achieved or that such cost savings had previously been misstated. Quite the opposite, Robinson Humphrey stated that Halliburton's merger-related cost savings would lead to increased profitability in the following year:

> Halliburton recently acknowledged its deeper than anticipated cost cuts following the 1998 Dresser merger and we believe HAL's incremental profit margin will significantly add to profitability next year. [Robinson Humphrey, 10/5/1999]

62. The market's continued belief in Halliburton's previous estimates of $500 million in merger-related cost savings is evidenced by the fact that on October 22, 1999—18 days after the October 4, 1999 release—multiple analysts continued to reiterate the estimated $500 million in merger-related savings. Robinson Humphrey stated:

> Management announced that at the end of the quarter, the company was 85% through with the closure of an expected 500 facilities in the cost reduction initiatives. Management now expects cost savings to reach $500 million by the end of next year, up from the $250 million the company forecast at the time of the merger. [Robinson Humphrey, 10/22/1999]

63. Other analysts noted that Halliburton was on track with the planned headcount reductions and facility closures following the Dresser merger:

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66 Halliburton Press Release, October 4, 1999.

67 Halliburton Press Release, October 4, 1999.

68 Halliburton Press Release, October 4, 1999.

69 Halliburton Press Release, October 4, 1999.

> A year after the Dresser merger was completed, the integration is now complete. Head-count has been reduced by 10,000 and 400 of a targeted 500 facilities have been closed. [Salomon Smith Barney, 10/22/1999]
>
> On the merger front, Halliburton noted that its merger with Dresser Industries is essentially complete, with more than 500 facilities closed. [Brown Brothers Harriman, 10/28/1999]

64. Second, following the alleged partial corrective disclosure on October 4, 1999, the Company did not change its estimate of the cost savings from the merger.[70]

65. Third, the joint ventures that the Company announced it was selling were related to Halliburton's Dresser Equipment Group, a non-core part of the business that the Company had indicated all along it might divest (and analysts expected the Company would). For example, before and during the class period, analysts stated:

> It is our understanding that **Halliburton's long-term strategy does not envision the continuation of the Dresser Energy Group.** Each of the units that make up this group has a respectable market position within its industry. However, **none represents clear growth opportunities or long-term synergies for Halliburton's core oilfield business**. [CIBC, 11/9/1998, emphasis added]
>
> **Dresser's energy equipment business** consists of companies that provide a variety of products to the pipeline, refining, chemical and petrochemical industries. However, some of these are likely to be **non-core businesses for Halliburton**. As such, within the constraints of a pooling of interests merger, we expect Halliburton to divest, joint venture or spin off segments of the unit in the near future. **We believe its two joint ventures with Ingersoll-Rand could be among the first segments to be restructured**. [Donaldson, Lufkin & Jenrette, 3/1/1999, emphasis added]
>
> We have also **assumed that the Dresser Energy Equipment group will be sold** during 2000 and have included this group's earnings at half the level of 1999. While we don't know the timing of a sale or, more likely, sales of individual segments of this business, there is already significant interest and **a clear inclination by HAL management to get out**. [Merrill Lynch, 7/23/1999, emphasis added]
>
> We view the sale of the joint ventures as a **favorable exit strategy** for the company, **which had been reviewing the divisions within the Dresser Equipment Group for the possible divestiture of some or all of its businesses**. [Brown Brothers Harriman, 10/5/1999, emphasis added]

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[70] *See*, for example, Halliburton 1999 Form 10-K, filed March 14, 2000.

66. Following the October 4, 1999 press release, analysts noted that the sale of the joint ventures was generally a positive development:

> We view the sale of the joint ventures as a **favorable exit strategy** for the company [...] [Brown Brothers Harriman, 10/5/1999, emphasis added]
>
> The decision by management to sell, rather than buy, the joint ventures interests is the **correct thing to do** to create shareholder value. More important, this action puts HAL in a stronger financial position to take advantage of other opportunities to build the company in areas that have greater stock market value. [CIBC, 10/5/1999, emphasis added]
>
> We view the recent announcement by Halliburton that the company will sell its interests in Dresser-Rand […] and Ingersoll-Dresser Pumps […] as a **strategic positive** […] [Deutsche Bank, 10/5/1999, emphasis added]
>
> The **positive [development]** is that HAL will sell its interests in Dresser-Rand and IR Dresser Pump to Ingersoll-Rand for $1.1 billion (pretax). [Merrill Lynch, 10/5/1999, emphasis added]
>
> [W]e view these transactions **positively** and applaud the company for seizing the opportunity to shed underperforming assets and deploy the proceeds to fortify an already strong balance sheet. [Dain Rauscher Wessels, 10/5/1999, emphasis added]
>
> The planned disposition of [Halliburton's] underperforming Dresser Equipment Group joint ventures with Ingersoll-Rand […] appears a **good strategic move** […] [Jefferies, 10/5/1999, emphasis added]

67. Thus, the Company's announcement that it was selling its Dresser joint ventures was not corrective of any alleged misrepresentation regarding cost savings from the merger because, as analysts before and during the class period indicated, this non-core part of the Company's business did not represent clear growth opportunities or long-term synergies. In fact, analysts generally viewed the sale of the joint ventures as positive.

68. Fourth, the pre-announcement of lower 3Q99 earnings was not corrective of any alleged misrepresentation regarding cost savings from the merger because the reduced earnings was primarily related to lower-than-expected profits from the two joint ventures that were being sold, as well as overall market weakness:

> HAL announced that third-quarter EPS would come in $0.06-$0.07 less than expected and attributed the **entire shortfall to the disappointing performance of the two joint**

> **ventures**. The company also stated that its other business segments should perform according to expectations set at the end of the previous quarter. [Dain Rauscher Wessels, 10/5/1999, emphasis added]
>
> Also announced was a **lower-than-expected third quarter earnings** outlook, in the range of $0.11-$0.13 (or $0.09, excluding the non-recurring benefit), which includes a $20 million pretax (or $0.03 after taxes) benefit relating to the interest income from a tax refund. The negative surprise is **due primarily to a $40 million disappointment in DR and IDP**. To a lesser extent, the quarter was negatively affected by the timing of the revenue recognition of new orders in the Engineering and Construction division. [Salomon Smith Barney, 10/15/1999, emphasis added]

As discussed above, it was understood from the time of the merger that the joint ventures were not expected to create growth opportunities or synergies.

69. Other analyst statements show that downward pressure on earnings estimates and the stock price was caused by market factors that had nothing to do with merger-related cost savings. For example, analysts noted that the industry was experiencing a slower-than-expected recovery due, in part, to low oil prices:

> The company's announcement of weakness across virtually every business line in 3Q is not surprising, given the slower than anticipated oilfield industry recovery . . . We have been warning of this situation, but the oilfield service stock prices have ignored this possibility all summer. Now that the results are starting to be reported, and crude oil and natural gas prices are seasonally weaker, investors are quick to bail out of these stocks." [CIBC, 10/5/1999]
>
> Stocks pulled back sharply yesterday on Halliburton's earnings preannouncement and escalating concerns about oil price declines. [Brown Brothers Harriman, 10/6/1999]

70. Other analysts highlighted concerns with overall market conditions specifically in Halliburton's E&C business:

> Revenues and operating profits within the Engineering & Construction business were also weak in the quarter, primarily due to timing issues (several large projects have not progressed sufficiently to recognize significant profits). [Morgan Stanley, 10/5/1999]
>
> With expectation of a delayed recovery in both the oilfield services as well as engineering and construction businesses, we are reducing our 2000 EPS estimates... [Dresdner Kleinwort Benson, 10/6/1999]

71. In short, the alleged corrective disclosure on October 4, 1999 was not corrective of any alleged misrepresentation. Neither the Company nor analysts indicated that the alleged

disclosure revealed anything about the merger-related cost savings not being achieved. To the contrary, the Company and analysts continued to reiterate that the cost-saving measures announced at the time of the merger had been substantially completed. Additionally, the two Dresser joint ventures being sold were non-core to Halliburton's business and had not previously been expected to create long-term synergies, and the market generally viewed their divesture as positive. Finally, the lower-than-expected quarterly earnings were unrelated to merger cost savings and, as analysts indicated, caused by other factors, including overall market weakness. For all these reasons, the October 4, 1999 alleged corrective disclosure was not corrective and thus provides no evidence that the alleged misrepresentations had price impact.

2. The January 5, 2000 alleged corrective disclosure—when Merrill Lynch and Brown Brothers Harriman lowered their earnings estimates—was not corrective of any alleged misrepresentation regarding cost savings from the Dresser merger and thus provides no evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosure
Management expects approximately $500 million in cost savings from the Dresser merger.	Brown Brothers Harriman and Merrill Lynch reduce earnings per share estimates.

72. The Complaint does not allege January 5, 2000 as a corrective disclosure date. This date was added by the Fund's expert, Ms. Nettesheim, after her unscientific procedure of *first* searching for statistically significant price reactions across all 633 days during the class period and *then* attempting to relate the statistically significant price reactions to alleged misrepresentations.[71] Ms. Nettesheim found two analyst reports released on January 5, 2000, which announced lowered earnings estimates for Halliburton.[72] These reports were not corrective of the alleged misrepresentations regarding the cost savings from the Dresser merger.

73. The first report by Brown Brothers Harriman & Co. announced lowered earnings expectations that reflected decreased revenue and operating profit across Halliburton's three business segments (as summarized in the table below).[73] Brown Brothers Harriman's lowered

71 Nettesheim Report, ¶¶41-45, 88-92.

72 Brown Brothers Harriman & Co., January 5, 2000; Merrill Lynch, January 5, 2000.

73 Brown Brothers Harriman & Co., January 5, 2000.

earnings expectations were not in any way corrective or related to the alleged misrepresentations regarding the merger cost savings. The report did not mention cost savings from the Dresser merger or indicate that lowered expectations were due to reduced cost savings.

Business Segment	Revenue Decrease	Operating Profit Decrease
Energy Services	$200 million	$95 million
Engineering & Construction	$50 million	$40 million
Dresser Equipment Group	No decrease	$4 million

74. Merrill Lynch also issued a January 5, 2000 report noting decreases to earnings estimates.[74] Merrill Lynch cited three reasons for its lowered expectations. Two of these reasons were related to weak market conditions that had nothing to do with the Dresser merger—in particular, (1) reduced offshore construction results due to a sharp drop in North Sea activity and the delayed start of deepwater development projects,[75] and (2) reduced growth estimates for upstream activity outside the United States due to low predicted spending by Halliburton's large customers.[76] When discussing its third reason for the downgrade, Merrill Lynch did not question management's estimated $500 million in cost savings or suggest that a different amount of cost savings had actually been achieved. Rather, Merrill Lynch stated that the synergies from the Dresser merger "appear to be less powerful than *we had envisioned*," and continued to state that management estimated savings of $500 million.[77]

75. Merrill Lynch's prior reports demonstrate that the analyst had previously expected cost savings higher than that indicated by the Company. In a report almost a year before January 5, 2000, the Merrill Lynch analyst stated that he expected cost savings of $350 million, which at the time was $100 million higher than the Company's stated $250 million estimate of savings.[78]

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[74] Merrill Lynch, January 5, 2000.

[75] Merrill Lynch, January 5, 2000 ("**$0.10 of our 2000 reduction comes from a big cut in our assumptions for HAL's offshore construction business**. The **North Sea likely will be very weak** in 2000 and this has historically been a stronghold for HAL. Also, **awards of major deepwater development projects continue to be delayed**. While HAL should benefit from stronger deepwater earnings in 2001, the biggest positive impact on results may not be until 2002…") (emphasis added).

[76] Merrill Lynch, January 5, 2000 ("We are **reducing our forecast of the 2000 growth rate for upstream** outside the U.S. from 12% to 10% because the **super-majors have indicated relatively cautious spending** plans for 2000.") (emphasis added).

[77] Merrill Lynch, January 5, 2000 ("**Synergies** from the Dresser merger appear to be **less powerful than we had envisioned** both in oilfield and offshore construction operations. HAL's earnings from operations have again underperformed those of Schlumberger in the downcycle **even with cost savings estimated by management of $500 million**.") (emphasis added).

[78] Merrill Lynch, January 27, 1999 ("**Our estimates include steady earnings improvement in the last three quarters of 1999 as combination benefits are realized.** We have assumed a modest sequential increase in oilfield revenues during the second

76. Furthermore, Halliburton did not reduce its estimate of cost savings from the Dresser merger before or following the alleged corrective disclosures on January 5, 2000. Instead, it maintained the estimate of $500 million.[79]

77. Moreover, after making an appropriate multiple comparison adjustment, there was no statistically significant price reaction following the alleged corrective disclosure on January 5, 2000. When tested in isolation, the price reaction following the alleged corrective disclosure on January 5, 2000 was statistically significant. However, this result should not be surprising since this date was added by Ms. Nettesheim to the list of alleged corrective disclosures using her unscientific procedure that *starts* by searching for statistically significant price reactions across all 633 days during the class period and *then* attempts to relate the statistically significant price reactions to alleged misrepresentations. After performing 633 statistical tests, it is not at all surprising to find a price reaction that in isolation is statistically significant at the 5% level – with no material news one would expect to find over 30 such dates. Given that January 5, 2000 was added as an alleged corrective disclosure as result of searching across 633 days on which Ms. Nettesheim performed statistical tests, it is appropriate to adjust for 633 multiple comparisons when testing the statistical significance of the price reaction on this date. After the proper adjustment, the price reaction following the alleged corrective disclosure on January 5, 2000 was not statistically significant. *See* Exhibit 1. This lack of statistical significance does not support price impact of the alleged misrepresentations.

78. In short, there was no corrective information released on January 5, 2000 related to the alleged misrepresentations regarding the cost savings from the merger and, after making an appropriate multiple comparisons adjustment, no statistically significant price reaction. Brown Brothers Harriman gave no indication its lowered expectations were due to reduced merger-related cost savings, while Merrill Lynch lowered its expectations because of market weakness and *its own* reduced estimates of merger-related synergies. Merrill Lynch did not dispute the $500 million in cost savings that management expected. Thus, the January 5, 2000 alleged corrective disclosure provides no evidence of price impact from the alleged misrepresentations.

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half, which would clearly be at risk if oil prices do not recover to the mid teens or better by mid year […] **We are estimating consolidation savings of $350 million (pretax)**.") (emphasis added).

[79] *See*, for example, Halliburton 1999 Form 10-K, filed March 14, 2000.

3. The October 24, 2000 alleged corrective disclosure—when the Company announced it was planning to restructure its engineering and construction business—was not corrective of any alleged misrepresentation regarding cost savings from the Dresser merger and thus provides no evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosure
Management expects approximately $500 million in cost savings from the Dresser merger. The Dresser merger is "behind us."	Halliburton planned to combine its E&C segments into one entity.

79. On October 24, 2000, Halliburton announced its plans to restructure its E&C business.[80] This news was received favorably by analysts.[81] The same day, Halliburton disclosed several negative developments, none of which mentioned or related to cost savings from the Dresser merger:

- Brown & Root Energy Services' ("BRES'") operating income was negatively affected by continuing low capacity utilization and by customer delays.
- The E&C segment's revenue decreased 21% from the previous year, largely due to reduced customer spending associated with Kellogg Brown & Root's ("KBR") downstream petroleum industry business.
- Operating income from the E&C Group in the third quarter was flat compared to the previous year.[82]

80. Public statements from the Company on October 24, 2000 did not revise merger-related cost savings or retract management's general observations that the merger is "behind us." Likewise, analysts did not interpret the October 24, 2000 announcements as a correction of the Company's prior statements. Several analysts issued reports in response to the Company's

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80 Halliburton Conference Call, October 24, 2000.

81 A.G. Edwards & Sons, Inc., October 25, 2000 ("Restructuring is positive and oilfield service recovery continues."); Frost Securities, October 25, 2000 ("We applaud Halliburton's intention to reorganize and consolidate its three E&C business units to improve profitability. This move is precisely the type of aggressive positive action we expect from Dave Lesar and the rest of Halliburton's management to drive the company's earnings significantly higher."); Merrill Lynch, October 25, 2000 ("On the positive side, management is combining its E&C businesses to reduce overhead and increase efficiencies for common engineering tasks."); Morgan Stanley, October 25, 2000 ("We candidly support [the restructuring] . . . Our guess is that the cost savings associated with the restructuring will be meaningful.").

82 Halliburton Press Release, October 24, 2000.

restructuring announcement and none mentioned merger-related cost savings. Rather, analysts were focused on multiple negative factors influencing the Company's performance that had no relationship to cost savings from the merger. These included: a depressed outlook for customer spending and the lack of predictability;[83] reduced customer spending in the KBR downstream petroleum business;[84] delays in the initiation of construction projects;[85] lower international spending;[86] and decreased activity by newly consolidated customers.[87]

81. Analysts specifically noted that the planned restructuring was motivated by the weak market environment, not by any failed cost savings:

> **Engineering and Construction Group Faces A Challenging Market, Leading To Reorganization** [Prudential Securities, 10/25/2000]
>
> The re-combination of Brown & Root will reduce duplicative overhead and should allow more efficient use of the pool of engineers who can work on common functions across upstream and downstream projects. The **split up seemed to work in strong markets, but appears to be hurting profitability in the weaker market**. This has been particularly true at BRES. [Merrill Lynch, 10/25/2000, emphasis added]
>
> In spite of a $6.1 billion backlog at ELC (up from $5.5 billion at the end of 2Q2000), the **operating environment remains weak** and revenues are expected to decline in 2001. Although maintenance has picked up, **large projects continued to be delayed and consolidation among the major oil companies may cause additional delays**. As a result, Halliburton has decided to consolidate the E&C businesses into one entity and focus on cost cutting. The goal is to generate consistent and growing profitability within the segment. [A.G. Edwards, 10/25/2000, emphasis added]

82. Thus, the alleged corrective disclosure on October 24, 2000 did not disclose any corrective information regarding the alleged misrepresentations concerning the cost savings from the merger. The planned restructuring was not viewed as a correction of the merger or the Company's prior statements regarding the merger-related cost savings. In fact, analysts viewed

[83] CIBC World Markets, October 25, 2000.

[84] CIBC World Markets, October 25, 2000; Frost Securities, October 25, 2000.

[85] Jefferies, October 25, 2000; Salomon Smith Barney, October 25, 2000; Jefferies, October 26, 2000.

[86] Dain Rauscher Wessels, October 25, 2000.

[87] Note that while the contemporaneous movements in the stock of other industry participants are controlled for by the industry indices, it is possible that industry-related information affected Halliburton's stock more than other companies in the same industry. For example, news of weak international spending could have a larger effect on Halliburton than on other companies in the same industry given that the "real leverage" of Halliburton's core energy business segment is in overseas markets, and this segment generally derives about 60-70% of its revenues from international markets. Prudential Securities, October 25, 2000; Dain Rauscher Wessels, October 25, 2000.

the planned restructuring positively and as a response to the challenging market conditions that were impacting the Company's performance. Thus, the October 24, 2000 alleged corrective disclosure provides no evidence that the alleged misrepresentations had a price impact.

4. The December 21, 2000 alleged corrective disclosure—when the Company formally announced the restructuring of its engineering and construction business and a $120M after-tax charge—was not corrective of any alleged misrepresentation regarding cost savings from the Dresser merger and thus provides no evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosure
Management expects approximately $500 million in cost savings from the Dresser merger. The Dresser merger is "behind us."	Halliburton noted a general negative near-term outlook, confirmed its plan to restructure its E&C business, and announced a $120 after-tax charge related to this restructuring and project losses.

83. In a December 21, 2000 press release, Halliburton expressed concerns regarding the near-term market outlook, confirmed its intention to restructure its E&C business, and announced a $120 million after-tax charge related to the restructuring and ongoing construction projects.[88] The press release explained the reasons for the negative outlook, the charge, and the restructuring. These reasons included a consolidating customer base, difficult relationships with certain customers, financially stressed competitors, and a "fiercely competitive environment."[89] None of these reasons had anything to do with cost savings from the Dresser merger. Such cost savings were never mentioned in the press release. The only mention of Dresser is a reference to positive results from the Dresser Equipment Group and a confirmation that the sale of the Dresser Equipment Group (announced earlier in the year) was in process.[90]

84. The announcement regarding the restructuring was a reiteration of the Company's statement on the 3Q earnings call.

> The **announced restructuring**, in which parts of the mid-stream Brown and Root Energy Services (BRES) businesses will be combined with the E&C segment, is **consistent with**

[88] Halliburton Press Release, December 21, 2000.

[89] Halliburton Press Release, December 21, 2000.

[90] Halliburton Press Release, December 21, 2000.

> **indications made on the third quarter earnings conference call**. [Salomon Smith Barney, 12/21/2000, emphasis added]

85. In the two days immediately following the press release, no analyst mentioned cost savings from the Dresser merger.

86. In addition, there was no statistically significant price reaction after the December 21, 2000 announcement (both before and after the adjustment for multiple comparisons). Ms. Nettesheim also did not find a statistically significant price reaction on December 21, 2000. Yet, she examined the price reaction on December 22, 2000, found a statistically significant price reaction on this date, and with no valid justification attributed this reaction to the alleged corrective disclosure on December 21, 2000.[91] As shown in the chart below, Halliburton's price decline on December 22, 2000 occurred at the end of the trading day while the alleged corrective disclosure was announced at the *beginning of the prior* trading day, thus essentially two full trading days earlier.[92] The allegation that the market did not react to a piece of news for two trading days, and then reacted to it, is inconsistent with the conclusion that Halliburton's stock traded in an efficient market. Research has shown that stock prices in an efficient market react very quickly to new information. For example, according to a frequently cited study, after company announcements of earnings or dividends, the majority of the stock market response *is already completed* within 5 to 10 minutes.[93] The chart also shows that there is a large spike in trading volume just around the price decline, suggesting that something new

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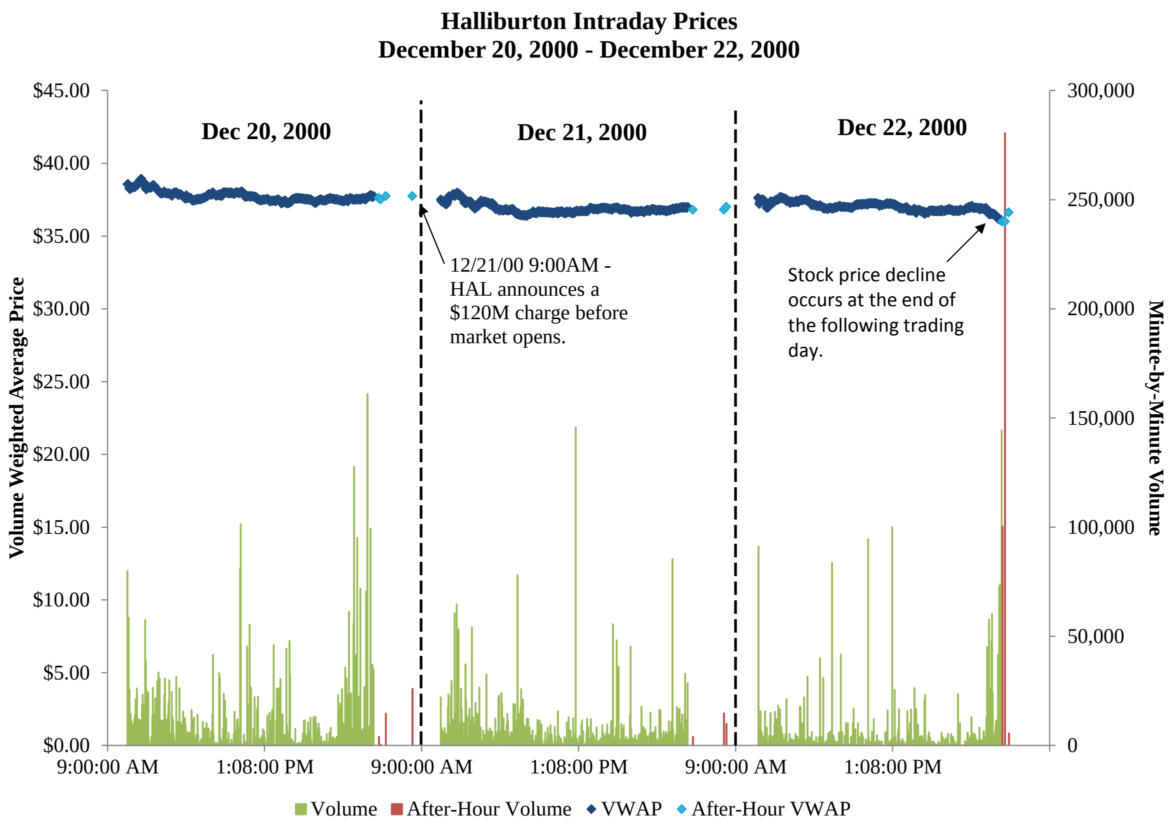
[91] In her rebuttal report, Ms. Nettesheim claims that she did not rely on the Company disclosure on December 21 to test her price reaction, but that she relied on the analyst commentary the following day, December 22. Nettesheim Rebuttal Report, ¶38. However, her first report seems to clearly indicate that the information released to the market on December 21 is the alleged corrective disclosure: "This is an instance where the Company released negative news, all of which appears to be related to cost overruns on the fixed-price contracts at its engineering and construction units," and this is the information that the Fund alleges "could have been and should have been disclosed earlier." Nettesheim Report, ¶106. Moreover, all the quotes that Ms. Nettesheim includes from analysts regarding this alleged corrective disclosure were from December 21 rather than December 22. In addition, I reviewed the analyst commentary on December 22 and did not find new information disclosed on that day that was any more potentially corrective of alleged misrepresentations than what was already disclosed on December 21.

[92] Halliburton Press Release, December 21, 2000, 8:59 AM.

[93] *See*, for example, Richard A. Brealey & Stewart C. Myers, *Principles of Corporate Finance* (McGraw-Hill: New York, 7th ed., 2003) 351-353 ("To analyze the semistrong form of the efficient-market hypothesis, researchers have measured how rapidly security prices respond to different items of news, such as earnings or dividend announcements, news of a takeover, or macroeconomic information […] A study by Patell and Wolfson shows just how fast prices move when new information becomes available. They found that, when a firm publishes its latest earnings or announces a dividend change, the **major part of the adjustment in price occurs within 5 to 10 minutes of the announcement**.") (emphasis added). *See also* James M. Patell & Mark A. Wofson, "The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements," *Journal of Financial Economics* 13 (1984), 223-252.

may have happened in the market at the end of December 22. There is no reasonable link between the alleged corrective disclosure and any price movement two trading days later.



Notes and Sources:
Data from TAQ. Prices shown are volume-weighted average price by minute.
Minute-by-minute trading data show from 9:00AM - 5:15PM each day.

87. Moreover, after making the appropriate adjustment for 35 multiple comparisons, there was no statistically significant price reaction on December 22, 2000. *See* Exhibit 1 for details.

88. In short, the December 21, 2001 alleged corrective disclosure contained no corrective information related to the alleged misrepresentations concerning the Dresser merger, and the market did not react. The announced restructuring was consistent with the Company's announcement on its 3Q earnings call in October, and the reasons for the announced restructuring, charge and general negative outlook were unrelated to the merger-related cost savings. The December 21, 2000 alleged corrective disclosure provides no evidence that the alleged misrepresentations had a price impact.

5. The January 30, 2001 alleged corrective disclosure—when the Company announced a $193 million pre-tax charge—was not corrective of any alleged misrepresentation regarding cost savings from the Dresser merger and thus provides no evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosure
Management expects approximately $500 million in cost savings from the Dresser merger. The Dresser merger is "behind us."	Halliburton announced $193 million pre-tax charge related to E&C restructuring and project losses.

89. The Fund and its expert, Ms. Nettesheim, allege that on January 30, 2001, Halliburton increased the $120 million charge announced on December 21, 2000 to $193 million.[94]

90. Yet, the Company stated that this $193 million charge was pre-tax, with the after-tax charge being only $118 million.[95] This announcement was consistent with the $120 million after-tax charge announced on December 21, 2000.

91. Moreover, there was no statistically significant price reaction following the January 30, 2001 alleged corrective disclosure (both before and after the adjustment for multiple comparisons). *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction following this alleged corrective disclosure.[96]

92. Thus, the alleged corrective disclosure on January 30, 2001 contained no new information related to the cost savings from the merger and was not corrective of the alleged misrepresentations, and the market did not react. This alleged corrective disclosure provides no evidence of price impact from the alleged misrepresentations.

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94 Complaint, ¶155 and Nettesheim Report, ¶106, footnote 71.

95 Halliburton Press Release, January 30, 2001 ("The 2000 fourth quarter **pre-tax charge** related to the engineering and construction businesses **was $193 million**, with $36 million related to severance and restructuring and **$157 million for project losses**.") (emphasis added). *See also* Halliburton's earnings call on January 30, 2001 ("**As we announced in late December**, we recorded charges in relation to the Engineering and Construction businesses of **$193 million before tax or $118 million net of tax**, which is about 27 cents per share. The charge included 36 million for before tax for severance and other restructuring charges and 157 million before tax in relation to cost increases on several projects, including two large [fixed] projects where Kellogg Brown and Root participates as a member of construction joint ventures.") (emphasis added).

96 Nettesheim Report, Exhibit 17. This exhibit reports the statistical significance of the price reaction on every day of the class period and shows no statistically significant price reaction on January 30, 2000.

93. In summary, the alleged misrepresentations during the class period regarding the cost savings from the Dresser merger did not impact Halliburton's stock. Before the beginning of the class period, numerous statements by the Company and analysts reflected an expectation of $500 million in merger-related cost savings, and the Company disclosed that the cost-saving measures announced at the time of the merger had substantially been achieved. The alleged misrepresentations during the class period did not contain new information related to the cost savings from the merger, and the market did not interpret the alleged misrepresentations as containing new information. Additionally, the disclosures that the Fund alleges were corrective were not, in fact, corrective and provide no evidence of price impact from the alleged misrepresentations.

IX. THE ALLEGED MISREPRESENTATIONS REGARDING HALLIBURTON'S ACCOUNTING FOR UNAPPROVED CLAIMS ON FIXED-PRICE CONSTRUCTION PROJECTS DID NOT IMPACT HALLIBURTON'S STOCK PRICE

94. The Fund alleges that Halliburton engaged in "pervasive accounting manipulations"[97] by using unapproved claims for cost overruns on fixed-price construction contracts to increase revenues and inflate the value of its stock. According to the Fund, the Company changed its accounting for unapproved claims without disclosing this change to investors until its 1999 Annual Report.[98] The Company's 1999 Form 10-K, released on March 14, 2000, disclosed: "Claims and change orders which are in the process of being negotiated with customers, for extra work or changes in the scope of work are included in revenue when collection is deemed probable."[99] The Fund alleges that this disclosure and Halliburton's financial statements before and after it were misleading because Halliburton allegedly included claims in revenues even when their collection was not probable.[100,101] According to the Fund and its expert, the truth behind the Company's accounting for unapproved claims was revealed to the market in a series of alleged corrective disclosures, causing the stock price to decline. The chart

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97 Complaint, ¶2.

98 Complaint, ¶¶211, 213.

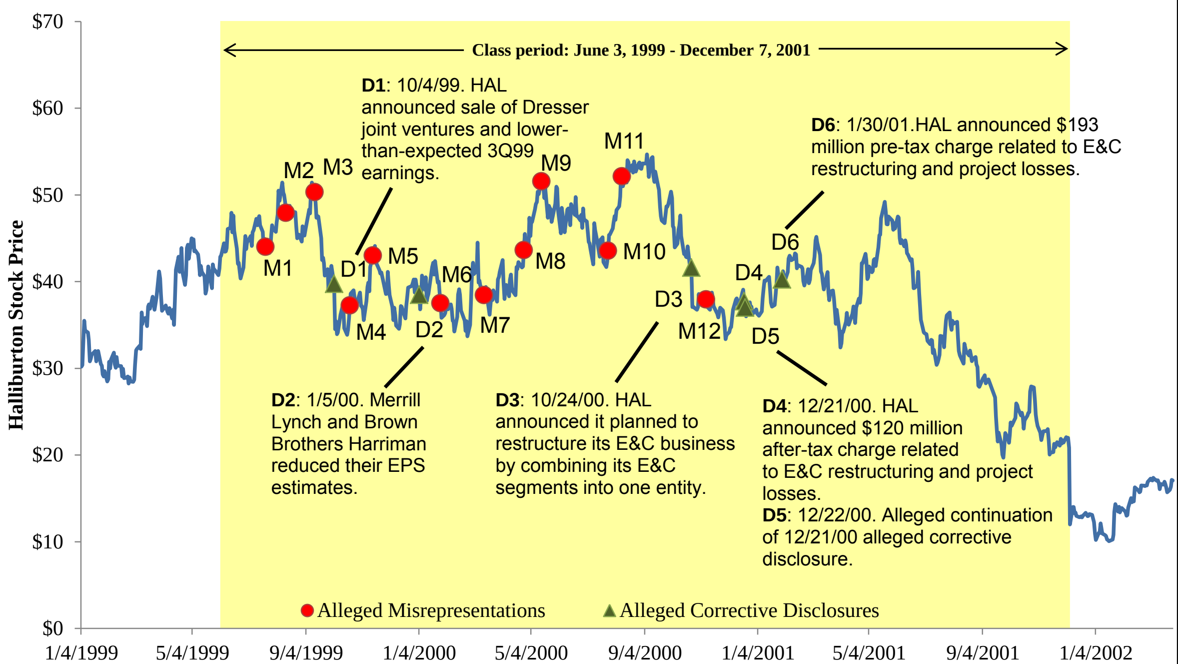
99 Halliburton 1999 Form 10-K, filed March 14, 2000, p.34.

100 Complaint, ¶¶213, 231.

101 The Fund also alleges that the 1999 Form 10-K inaccurately represented that claim revenue was $89 million in 1998 and $98 million in 1999 because the 1999 figure omitted $34 million in unapproved claims in connection with joint venture projects. Complaint, ¶¶215, 233. The Fund does not contend that the alleged misrepresentation regarding the joint venture claim revenue reported in the 1999 Form 10-K was ever corrected during the class period, and I have found no evidence that it was.

below summarizes the alleged misrepresentations and alleged corrective disclosures regarding the accounting for unapproved claims.

Alleged Misrepresentations and Alleged Corrective Disclosures
Unapproved Claims



Notes and Sources:
Price data collected from Factset Research Systems, Inc.
Alleged misrepresentations and alleged corrective disclosures aggregated from the Complaint and the Nettesheim reports.

95. The Complaint alleges there were misrepresentations concerning the accounting for unapproved claims on 12 dates, summarized in the table below.[102] As discussed above in Section VII, there was no statistically significant price reaction after any of these alleged misrepresentations (before and after adjusting for multiple comparisons).

Alleged Misrepresentations – Unapproved Claims		
M1	7/22/99	Halliburton reported 2Q99 results and held earnings call.
M2	8/13/99	Halliburton filed its 2Q99 10-Q.
M3	9/13/99	Halliburton presented at Dain Rauscher Wessels conference.

[102] Complaint, ¶¶108-154.

Alleged Misrepresentations – Unapproved Claims		
M4	10/21/99	Halliburton reported 3Q99 results and held earnings call.
M5	11/15/99	Halliburton filed its 3Q99 10-Q.
M6	1/27/00	Halliburton reported 4Q99 results and held earnings call.
M7	3/14/00[103]	Halliburton's Annual Report stated that claims are accounted for as revenue only when collection is "deemed probable."
M8	4/26/00	Halliburton reported 1Q00 results and held earnings call.
M9	5/15/00	Halliburton filed its 1Q00 10-Q.
M10	7/26/00	Halliburton reported 2Q00 results and held earnings call.
M11	8/10/00	Halliburton filed its 2Q00 10-Q.
M12	11/9/00	Halliburton filed its 3Q00 10-Q.

96. According to the Fund and its expert, the alleged "truth" behind the alleged misrepresentations regarding Halliburton's accounting for unapproved claims was revealed to the market on the following dates: October 4, 1999; January 5, 2000; October 24, 2000; December 21-22, 2000; and January 30, 2001.[104] The table below summarizes the alleged corrective disclosures. Three were alleged in the Complaint.[105] The Fund's expert, Ms. Nettesheim, added three additional dates after her procedure of *first* searching for statistically significant price reactions across all 633 days during the class period and *then* attempting to relate the statistically significant price reactions to alleged misrepresentations.[106]

Alleged Corrective Disclosures – Unapproved Claims			Source
D1	10/4/99	Halliburton announced sale of Dresser joint ventures and lower-than-expected 3Q99 earnings.	Nettesheim
D2	1/5/00	Merrill Lynch and Brown Brothers Harriman reduced their earnings per share estimates.	Nettesheim

[103] *See* footnote 9.

[104] Complaint, ¶¶144, 150, 155; Nettesheim Report, ¶¶84-112, including footnote 71 on page 51.

[105] Complaint, ¶¶144, 150, 155.

[106] Nettesheim Report, ¶¶41-45, 84-112, including footnote 71 on page 51.

		Alleged Corrective Disclosures – Unapproved Claims	Source
D3	10/24/00	Halliburton announced it planned to restructure its E&C segment by combining its E&C businesses into one entity.	Complaint & Nettesheim
D4	12/21/00	Halliburton announced $120 million after-tax charge related to E&C restructuring and project losses. Losses were in part due to negotiations with customers that were not resolved as originally anticipated.	Complaint & Nettesheim
D5	12/22/00	Alleged continuation of 12/21/00 alleged corrective disclosure.	Nettesheim
D6	1/30/01	Halliburton announced $193 million pre-tax charge related to E&C restructuring and project costs.	Complaint & Nettesheim

97. As discussed in the sections below, the disclosures that the Fund alleges as corrective were not, in fact, corrective of any alleged misrepresentation regarding accounting for unapproved claims. During the class period, Halliburton never restated revenues and specifically never restated revenue from unapproved claims. Moreover, the market never questioned the Company’s accounting practices with respect to unapproved claims during the class period. In fact, when the Company first disclosed its policy for accounting for unapproved claims, the market did not react.

98. Additionally, there were no statistically significant price reactions after the following alleged corrective disclosures:

– 01/05/2000 (after making the appropriate adjustment for multiple comparisons);
– 12/21/2000 (both before and after making the appropriate adjustment for multiple comparisons);
– 12/22/2000 (after making the appropriate adjustment for multiple comparisons); and
– 01/30/2001 (both before and after making the appropriate adjustment for multiple comparisons).

A. The October 4, 1999 alleged corrective disclosure—which did not mention accounting for unapproved claims—was not corrective of any alleged misrepresentation regarding unapproved claims and thus is not evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosure
Halliburton's financial statements, which included unapproved claim revenue.	Halliburton announced sale of Dresser joint ventures and lower-than-expected 3Q99 earnings.

99. The Company's statements in its October 4, 1999 press release and the market commentary reacting to those statements demonstrate that this press release was not corrective of the alleged misrepresentations regarding the Company's accounting for unapproved claims.

100. Halliburton's October 4, 1999 press release announced that the Company was selling its two Dresser joint ventures and anticipated lower-than-expected 3Q99 earnings.[107] The joint ventures Halliburton planned to sell were in the pump, turbine, and compressor manufacturing business—not the fixed-price construction business.[108] The press release announcing the sale contained no discussion of unapproved claims on fixed-price construction projects or the accounting treatment of such claims.[109] Analyst reports issued after the release did not discuss claims or accounting for claims,[110] nor were these topics discussed on Halliburton's October 4, 1999 conference call.[111]

101. Thus, the October 4, 1999 disclosure was not corrective of the alleged misrepresentations regarding unapproved claims and is not evidence of price impact from such alleged misrepresentations.

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[107] Halliburton Press Release, October 4, 1999.

[108] *See*, for example, Dresdner Kleinwort Benson, October 6, 1999, ("By divesting its stake in D-R, which manufactures gas and steam turbines and compressors, and in IDP, which is into [the] manufactur[ing] of specialty pumps...").

[109] Halliburton Press Release, October 4, 1999.

[110] 13 analysts issued reports after October 4, 1999, and none discussed unapproved claims or accounting for such claims.

[111] Halliburton Conference Call, October 4, 1999.

B. The January 5, 2000 alleged corrective disclosure—which did not mention accounting for unapproved claims—was not corrective of any alleged misrepresentation regarding unapproved claims and thus not evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosures
Halliburton's financial statements, which included unapproved claim revenue.	Merrill Lynch and Brown Brothers Harriman reduced their earnings per share estimates.

102. The Complaint does not allege that corrective information related to accounting for unapproved claims reached the market on January 5, 2000. This date was added by Ms. Nettesheim.[112] Yet, the Company did not make any statement on this date, and a review of analyst reports and news shows that no information corrective of the alleged misrepresentations about the accounting for unapproved claims reached the market on this date.

103. Ms. Nettesheim alleges that the reduction of earnings estimates by two analysts on this date, Brown Brothers Harriman and Merrill Lynch, is a corrective disclosure of alleged misrepresentations about the accounting for unapproved claims. None of the reasons for the analysts' estimates reduction related to or mentioned unapproved claims on fixed-priced construction contracts or the accounting for such claims. The two analysts cited multiple reasons for their reduction in estimates, including reduced E&C revenue and profit estimates due to expected weakness in the North Sea that had historically been a stronghold for Halliburton, and delays in the awarding of major deep water development projects. Neither analyst mentioned claims submitted to customers or the accounting treatment of such claims.

104. As discussed above in Section VIII.B.2, when tested in isolation, the price reaction on January 5, 2000 was statistically significant. This result should not be surprising since this date was added by Ms. Nettesheim to the list of alleged corrective disclosures on the basis of her unscientific procedure that *starts* by searching for statistically significant dates across all 633 days during the class period and *then* attempts to relate them to alleged misrepresentations.

105. Given that January 5, 2000 was added as an alleged corrective disclosure as a result of searching across 633 days, it is appropriate to adjust for 633 multiple comparisons when

[112] Nettesheim Report, ¶¶41-45, 88-92.

testing the statistical significance of the price reaction on this date. After the proper adjustment, the price reaction following the January 5, 2000 announcement was not statistically significant. *See* Exhibit 1. This lack of statistical significance does not support price impact of the alleged misrepresentations.

106. In summary, the January 5, 2000 alleged corrective disclosure was not corrective of the alleged misrepresentations regarding unapproved claims, and after making an appropriate multiple comparison adjustment, there was no statistically significant price reaction. This alleged corrective disclosure provides no evidence of price impact from the alleged misrepresentations regarding Halliburton's accounting for unapproved claims.

C. The October 24, 2000 alleged corrective disclosure—which did not mention accounting for unapproved claims—was not corrective of any alleged misrepresentation regarding unapproved claims and thus not evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosure
Halliburton's financial statements, which included unapproved claim revenue.	Halliburton planned to restructure its E&C segment by combining its E&C businesses into one entity.

107. The Fund's expert, Ms. Nettesheim, alleges that the information released on October 24, 2000 was corrective of the alleged misrepresentations about the accounting for unapproved claims.[113] However, Ms. Nettesheim does not point to any specific corrective information and only alleges (with no valid support) that information related to problems in Halliburton's E&C business was corrective of the alleged misrepresentations about accounting for unapproved claims.[114] Similarly, the Complaint offers no indication of how the information disclosed on this date is corrective of the alleged misrepresentations regarding Halliburton's accounting for unapproved claims.

[113] "After market close on October 24, 2000, while announcing its third quarter earnings release, the Company made a partial disclosure concerning the Company's booking unapproved claims on fixed-price contracts and lack of benefits from the Dresser merger." Nettesheim Report, ¶93.

[114] Specifically, Ms. Nettesheim states, "A significant portion of the negative news, as attributed to the Company, in news reports and by analysts, was related to the problems with the engineering and construction units that the Fund alleges could have been and should have been revealed earlier. Thus, a significant portion of the stock price decline on October 25, 2000 was related to the Company's booking unapproved claims on fixed-price contracts and lack of benefits from the Dresser merger alleged in the Complaint." Nettesheim Report, ¶93.

108. There is no indication that the Company's announcement of 3Q99 earnings or planned E&C restructuring on October 24, 2000 was corrective of, or even related to, the alleged misrepresentations regarding claims being included in revenues only when their collection was deemed probable. Halliburton's press release did not mention fixed-price construction contracts, unapproved claims, or the accounting for such claims.[115] During its conference call with analysts, Halliburton announced plans to consolidate its E&C business, but there was no discussion of the accounting for unapproved claims. During the call, the Company did state that "[t]his action [the E&C restructuring] may result in the redeployment of some of our assets, may impair our ability to negotiate outstanding claims on jobs and certainly will result in additional severance costs as well as potential other restructuring costs."[116] But that disclosure about potential impairment of the Company's ability to negotiate claims did not state that previously booked unapproved claims were not probable of collection when booked. Even if that disclosure had referred to previously booked unapproved claims, it referred to the ability to negotiate those claims on a going-forward basis, not to whether previously booked claims were deemed probable when booked. Moreover, in the Q&A section of the conference call, analysts asked a number of questions, but none asked about the ability to negotiate claims or the accounting for unapproved claims.[117]

109. Additionally, 17 analysts issued reports following Halliburton's October 24, 2000 press release and conference call. None discussed unapproved claims or the accounting treatment for such claims.

110. In fact, as explained in further detail above in Section VIII.B.3, after October 24, 2000, analysts were focused on negative factors influencing the Company's performance—none of which related to the accounting for unapproved claims. These included: a depressed outlook for customer spending and the lack of predictability;[118] reduced customer spending in the KBR downstream petroleum business;[119] delays in the initiation of construction projects;[120] lower international spending;[121] and decreased activity by newly consolidated customers.[122]

[115] Halliburton Press Release, October 24, 2000.

[116] Halliburton Conference Call, October 24, 2000.

[117] Halliburton Conference Call, October 24, 2000.

[118] CIBC World Markets, October 25, 2000.

[119] CIBC World Markets, October 25, 2000; Frost Securities, October 25, 2000.

111. In short, the October 24, 2000 alleged corrective disclosure was not corrective of the alleged misrepresentations regarding claims being included in revenues only when their collection was deemed probable, and thus, this alleged corrective disclosure provides no evidence of price impact from such alleged misrepresentations.

D. Because there was no statistically significant price reaction on December 21, 2000 and no indication that the market learned any information corrective of the alleged misrepresentations regarding accounting for unapproved claims, the December 21, 2000 alleged corrective disclosure provides no evidence of price impact

Alleged Misrepresentation	Alleged Corrective Disclosure
Halliburton's financial statements, which included unapproved claim revenue.	Halliburton announced $120 million after-tax charge related to E&C restructuring and project losses. Losses were in part due to negotiations with customers that were not resolved as originally anticipated.

112. On December 21, 2000, Halliburton issued a press release disclosing that the Company would take a $120 after-tax charge in 4Q00 related to the restructuring of its E&C businesses and losses on E&C projects. Of this $120 million, $25 million related to the restructuring, while the remaining $95 million was attributed to project losses.[123]

113. The Company further specified that some of the $95 million in project losses was due to cost overruns "[d]uring the quarter," mostly as a result of labor disturbances in Venezuela and West Africa. The rest of the $95 million charge was due to "negotiations with customers regarding cost increases on seven other projects [that] ha[d] not resulted in resolution of certain claims as originally anticipated."[124]

[120] Jefferies, October 25, 2000; Salomon Smith Barney, October 25, 2000; Jefferies, October 26, 2000.

[121] Dain Rauscher Wessels, October 25, 2000.

[122] Note that while the contemporaneous movements in the stock of other industry participants are controlled for by the industry indices, it is possible that industry-related information affected Halliburton's stock more than other companies in the same industry. For example, news of weak international spending could have a larger effect on Halliburton than on other companies in the same industry given that the "real leverage" of Halliburton's core energy business segment is in overseas markets, and this segment generally derives about 60-70% of its revenues from international markets. Prudential Securities, October 25, 2000; Dain Rauscher Wessels, October 25, 2000.

[123] Halliburton Press Release, December 21, 2000.

[124] Halliburton Press Release, December 21, 2000.

114. As discussed below, there is no indication that the market learned any corrective information about the previous alleged misrepresentations that unapproved claims would be booked as revenues only when their collection was "deemed probable." In fact, analysts focused on unrelated negative information released on this date. Moreover, the market did not react to the alleged disclosure on December 21, 2000.

1. There is no evidence that the market learned any corrective information regarding Halliburton's accounting policy of including claims in revenues only when their collection was "deemed probable"

115. The Company's alleged disclosure on December 21, 2000 attributed $95 million in project losses to cost overruns during the quarter on several large fixed-fee construction projects (mostly as a result of labor disturbances in Venezuela and West Africa) and to unresolved negotiations with customers regarding cost increases on seven other projects. Neither of these disclosures corrected the alleged misrepresentation about booking unapproved claims only when their collection was "deemed probable."

116. First, the cost overruns incurred on projects "[d]uring the quarter"[125] (mostly as a result of labor disturbances in Venezuela and West Africa) could not logically have been booked as revenue in previous quarters and are therefore clearly unrelated to the alleged misrepresentations regarding unapproved claims. Moreover, the risk of cost overruns connected to fixed-price contracts had been disclosed by the Company in its SEC filings before the beginning of the class period[126] and was known by the market. As analyst commentary shows, the market knew (even before the beginning of the class period) that fixed-price construction contracts carry a risk of cost overruns, and that Halliburton was subject to that risk as part of its business.[127]

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[125] Halliburton Press Release, December 21, 2000.

[126] *See*, for example, Halliburton 1998 Form 10-K, filed on March 23, 1999, p.18 ("[There are] risks that result from entering into fixed fee engineering, procurement and construction projects of the types provided by Halliburton Company where failure to meet schedules, cost estimates or performance targets could result in non-reimbursable costs which cause the project not to meet expected profit margins").

[127] *See*, for example, Prudential Securities, April 7, 1998 ("The company will be undertaking large, lump sum fixed price contracts. **The potential for cost overruns**, and lower earnings from some of this work, **will be an ever-present risk**.") (emphasis added); Robinson-Humphrey, October 3, 1998 ("Engineering and construction is an inherently risky business, as any number of problems can arise when transforming a project idea into a physical reality. … The segment also began accepting a **greater level of project risk by offering** gain sharing or **fixed price contracts**.") (emphasis added); Prudential Securities, October 7, 1998 ("The company will be undertaking large, lump-sum fixed-price contracts. **The potential for cost overruns is an inherent risk** of those businesses.") (emphasis added).

117. Second, on the unresolved negotiations, there is no indication that this alleged disclosure revealed to the market that the Company had not followed its stated accounting policy of booking unapproved claims only when their revenues were "deemed probable" at the time of booking. To the contrary, Halliburton stated in the release that a positive resolution had originally been anticipated for these claims.[128]

118. I conducted a review of the market commentary following December 21, 2000 to determine whether there was any indication that the market inferred that the collection of the unapproved claims was not deemed probable when booked. None of the analysts indicated that they learned anything corrective with respect to the previously stated accounting policy that unapproved claims would be included in Halliburton's revenues only when their collection was deemed probable. Nor did analysts indicate that they believed Halliburton was engaging in the "pervasive accounting manipulations" that the Fund alleges.

119. Instead, most analysts just repeated Halliburton's disclosure. For example, one analyst wrote:

> The balance of the write-off for cost overruns is related to negotiations with customers regarding cost increases on seven other projects, which have not resulted in resolution of certain claims that were originally anticipated. [Jefferies, December 22, 2000][129]

120. One analyst suggested that deterioration of customer relationships led to difficulties in claim resolution:

> Additionally, relationships with some customers have deteriorated and the cost increase claims on seven other projects have not resolved as expected. [CIBC Report, December 21, 2000]

121. Another analyst suggested that these types of charges were an expected cost of doing business in the construction industry. The analyst noted that "one could consider these profit adjustments on existing projects to be normal operating events in the E&C business" but "HAL has chosen to characterize these items as non-recurring."[130]

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[128] Halliburton Press Release, December 21, 2000.

[129] *See also* CIBC, December 21, 2000 ("Additionally, relationships with some customers have deteriorated and the cost increase claims on seven other projects have not resolved as expected."); Salomon Smith Barney, December 21, 2000 ("The remainder is project related, related to cost overruns on 2 large projects and disputes on 7 other projects that have not been settled.").

[130] A.G. Edwards & Sons, Inc., December 21, 2000.

122. Thus, there is no indication that the market learned anything corrective of the previously stated accounting policy of including claims in revenues only when their collection was "deemed probable." Rather, the evidence suggests that, to the extent in which market analysts paid attention to this part of the charge at all, they understood it to be due to new information regarding customer's positions on certain claims, not the revelation of alleged fraud.

2. Analysts focused on non-culpable negative information in the alleged corrective disclosure

123. The thrust of the December 21, 2000 press release focused on news that had nothing to do with the one sentence in the press release regarding developments in claims negotiations. For example, the release informed the market about "the poor near term market outlook for the downstream engineering and construction business," which Halliburton attributed to a "consolidating customer base, difficult relationships with certain customers, some financially stressed competitors and a fiercely competitive environment."[131]

124. This other non-culpable negative information dominated analyst discussion. Analysts discussed the Company's concerns regarding general market weakness:

> ...the operating environment remains weak... [A.G. Edwards, 12/21/2000]

> We remain concerned about the outlook for Halliburton's engineering and construction business, particularly in light of the current market conditions. [CIBC, 12/21/2000]

125. Analysts also noted that Halliburton's customer base was consolidating and customer spending was low:

> Despite the rise in oil and natural gas prices, HAL has experienced weak performance in its shallow-water marine construction and downstream E&C businesses. The customer base for E&C is consolidating . . . [CIBC, 12/21/2000]

> General industry-wide issues are also impacting the E&C business. Despite high oil and natural gas prices, spending for engineering and construction projects remains depressed. [CIBC, 12/21/2000]

126. Analysts observed that pressure on Halliburton's customer base was coupled with increased competition from other construction companies in the industry:

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[131] Halliburton Press Release, December 21, 2000.

> ...[F]inancially pressured competitors have intensified competition and pricing in the marketplace. [CIBC, 12/21/2000]
>
> The difficult operating environment has forced some of Halliburton's E&C competition to cut prices and increase competitiveness. [CIBC, 12/21/2000]

127. The market also noted that delays in the initiation of construction projects, due to depressed capital spending, were negatively impacting Halliburton:

> Lower activity levels at Kellogg Brown & Root's (KBR) downstream business continues to have a negative impact on revenues, as projects remain in the planning stage and capital spending remains depressed in the downstream business. [A.G. Edwards, 12/21/2000]
>
> The weakness in the near-term outlook for the Engineering & Construction businesses stems from the delay but not the cancelation of major Downstream and Offshore Construction projects by the Major International Oil Companies. [Jefferies, 12/22/2000]
>
> Engineering and Construction (E&C) experienced a 21% decline in revenues year over year. The disappointment was due to a lack of commitment to new projects by its customers. [PNC Advisors, 12/26/2000]

3. There was no statistically significant price reaction to the December 21, 2000 disclosure

128. The press release containing the alleged corrective disclosure was released before the market opened on December 21, 2000.[132] There was no statistically significant price reaction on December 21, 2000 (before and after the adjustment for multiple comparisons). Ms. Nettesheim's event study found no statistically significant price reaction on December 21, 2000.[133] The lack of a statistically significant price reaction does not support price impact of the alleged misrepresentations.

129. Even though Ms. Nettesheim found no statistically significant price reaction on December 21, 2000, she examined Halliburton's price reaction on December 22, 2000, found a statistically significant price reaction, and with no valid justification, attributed it to the disclosure on December 21.[134] As discussed above in Section VIII.B.4, Halliburton's price

[132] Halliburton Press Release, December 21, 2000, 8:59 AM.

[133] Nettesheim Report, ¶109.

[134] In her rebuttal report, Ms. Nettesheim claims that she did not rely on the Company disclosure on December 21 to test her price reaction, but that she relied on the analyst commentary the following day, December 22. Nettesheim Rebuttal Report, ¶38. However, her first report seems to clearly indicate that the information released to the market on December 21 is the

decline on December 22, 2000 occurred at the end of the trading day, essentially two full trading days after the announcement. The allegation that the market did not react to a piece of news for almost two full trading days, and then reacted to it, is inconsistent with the conclusion that Halliburton's stock traded in an efficient market. As noted above, research has shown that stock prices in an efficient market react very quickly to new information – finding, for example, that within 5 to 10 minutes the majority of the stock market response is already completed for many company announcements.[135] Thus, here there is no reasonable link between the alleged corrective disclosure and any price movement two trading days later.

130. Additionally, while the price movement on December 22, 2000 was statistically significant when tested on its own, after making the appropriate adjustment for 35 multiple comparisons, there was no statistically significant price reaction on that day either. *See* Exhibit 1 for details.

131. In summary, the alleged corrective disclosure on December 21, 2000 provides no evidence of price impact from the alleged misrepresentations regarding unapproved claims. Not only was there no statistically significant price reaction, but analysts also did not indicate they had learned anything corrective with respect to the Company's prior representations regarding the accounting for unapproved claims.

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alleged corrective disclosure: "This is an instance where the Company released negative news, all of which appears to be related to cost overruns on the fixed-price contracts at its engineering and construction units," and this is the information that the Fund alleges "could have been and should have been disclosed earlier." Nettesheim Report, ¶106. Moreover, all the quotes that Ms. Nettesheim includes from analysts regarding this alleged corrective disclosure were from December 21 rather than December 22. In addition, I reviewed the analyst commentary on December 22 and did not find new information disclosed on that day that was any more potentially corrective of alleged misrepresentations than what was already disclosed on December 21.

[135] *See*, for example, Richard A. Brealey & Stewart C. Myers, *Principles of Corporate Finance* (McGraw-Hill: New York, 7th ed., 2003), 351-353 ("To analyze the semistrong form of the efficient-market hypothesis, researchers have measured how rapidly security prices respond to different items of news such as earnings or dividend announcements, news of a takeover, or macroeconomic information […] A study by Patell and Wolfson shows just how fast prices move when new information becomes available. They found that, when a firm publishes its latest earnings or announces a dividend change, the **major part of the adjustment in price occurs within 5 to 10 minutes of the announcement.**") (emphasis added). *See also* James M. Patell & Mark A. Wofson, "The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements," *Journal of Financial Economics* 13 (1984), 223-252.

E. Because the alleged corrective disclosure on January 30, 2001 contained no new information and was not corrective of any alleged misrepresentation regarding unapproved claims, it provides no evidence of price impact from the alleged misrepresentations

Alleged Misrepresentation	Alleged Corrective Disclosure
Halliburton's financial statements, which included unapproved claim revenue.	$193 million pre-tax charge related to E&C restructuring and project costs.

132. According to the Fund and its expert, Ms. Nettesheim, on January 30, 2001, Halliburton increased the $120 million charge announced on December 21, 2000 to $193 million. Of the $193 million, $157 million was specifically related to project losses.[136]

133. As discussed in Section VIII.B.5 above, this $193 million was pre-tax and only $118 million after tax. In other words, the charge announced on January 30, 2000 was consistent with the charge announced on December 21, 2000. Moreover, there was no statistically significant price reaction following the January 31, 2001 disclosure (before and after the adjustment for multiple comparisons). *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction following this alleged corrective disclosure.[137]

134. In short, the alleged disclosure on January 30, 2001 contained no new information related to the accounting for unapproved claims and was not corrective of any alleged misrepresentation, and thus not evidence of price impact from the alleged misrepresentations.

F. There was no statistically significant price reaction when the Company first disclosed to the market on March 14, 2000 its policy for accounting for unapproved claims – evidence that the accounting treatment had no impact on Halliburton's stock price

135. On March 14, 2000, Halliburton disclosed its policy for accounting for unapproved claims. The Company's 1999 Form 10-K, issued on March 14, 2000, stated:

> Claims and change orders which are in the process of being negotiated with customers, for extra work or changes in the scope of work are included in revenue when collection is deemed probable.[138]

[136] Complaint, ¶155 and Nettesheim Report, ¶106, footnote 71.

[137] Nettesheim Report, Exhibit 17.

[138] Halliburton Form 10-K, filed March 14, 2000, p. 34. The same disclosure is included in the 1999 Annual Report.

136. The 1999 Form 10-K also stated:

> These claims and change orders, included in unbilled receivables, amounted to $98 million and $89 million at December 31, 1999 and 1998, respectively and are generally expected to be collected in the following year.[139]

137. There was no statistically significant price reaction on March 14, 2000 (before or after adjusting for multiple comparisons). *See* Exhibit 1.[140] Ms. Nettesheim's event study similarly did not find a statistically significant price reaction following the March 14, 2000 disclosure.[141]

138. A review of the analyst reports around the March 14, 2000 disclosure shows that no analyst commented on the Company's accounting policy for unapproved claims or the specific amounts booked. Only one analyst issued a report on March 14, 2000,[142] and this analyst made no mention of the accounting issue. Instead, the analyst focused on a comparison of Baker Hughes, Halliburton, and Schlumberger. No other analyst reports covering Halliburton were issued until nine days later, and those later reports made no mention of the change in accounting for unapproved claims or any amounts booked for this purpose.

139. In short, following March 14, 2000, analysts did not issue reports; they did not discuss unapproved claims or the change in accounting for such claims; and there was no price reaction. The lack of analyst commentary or a statistically significant price reaction to the disclosure on March 14, 2000 is evidence that how Halliburton accounted for the unapproved claims on fixed-price contracts did not impact Halliburton's stock price.

140. This lack of market reaction is not surprising because, according to finance theory, accounting changes that do not affect cash flows should have no effect on a company's stock price. The accounting for unapproved claims did not affect Halliburton's actual cash flows (with the possible exception of tax effects) because, in simple terms, the amount of cash that came in or went out of the Company remained the same regardless of the accounting

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[139] Halliburton Form 10-K, filed March 14, 2000, p. 34.

[140] This analysis of the price reaction to the "deemed probable" disclosure is not confounded by financial information in the 10-K filing—such as revenues or income—because such information had already been disclosed in the earnings announcement on January 27, 2000.

[141] Nettesheim Report, Exhibit 17.

[142] It is not clear whether this report was published before or after the 10-K was released.

treatment.[143] Finance theory tells us that, in an efficient market, the price of a stock reflects the expected discounted value of future cash flows. It is cash flows—not earnings—that affect the stock price.[144]

141. Empirical finance research has found that, as the theory of efficient markets predicts, when cash flows and accounting changes diverge, it is only the change in cash flows—not accounting numbers—that matters to the investors. For example Bradford Cornell's book, *Corporate Valuation*, discusses the empirical findings as follows:[145]

> The argument that "only cash matters" has more than theoretical backing; it is also supported by extensive research. This research focuses on listed companies for which it is possible to conduct direct tests of the relation between value and various measures of income, including cash flow and accounting earnings […] The results of these tests overwhelmingly support the view that corporate value is based on cash flow. When cash flow and earnings diverge, changes in value are associated with changes in cash flow, not changes in earnings.

142. Halliburton's March 14, 2000 announcement of the change in accounting treatment for unapproved claims did not affect the Company's actual cash flows, and the lack of analyst commentary or a statistically significant price reaction to the disclosure on March 14, 2000 is evidence that how Halliburton accounted for these claims did not impact its stock price.

G. Analyst commentary after the announcement of the SEC investigation regarding Halliburton's accounting for unapproved claims further demonstrates that the alleged misrepresentations had no price impact

143. After the end of the class period, in May 2002, the Company announced an SEC investigation regarding Halliburton's accounting for unapproved claims.[146] There was no statistically significant price reaction to this announcement. *See* Exhibit 1 for more details. Analysts stated after the announcement that Halliburton's accounting for unapproved claims was "unremarkable," the issues were "a non-event," and the amounts at issue were not material:

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[143] Note that different accounting treatments could affect the amount of tax paid and therefore affect after tax cash flows.

[144] *See*, for example, Richard A. Brealey, Stewart C. Myers & Franklin Allen, *Principles of Corporate Finance* (McGraw-Hill: New York, 11th ed., 2014).

[145] Bradford Cornell, *Corporate Valuation* (McGraw-Hill: New York, 1993), 104.

[146] Halliburton Press Release, May 28, 2002.

> Most of Halliburton's competitors use this accounting treatment, making Halliburton's use of it **unremarkable.** [Salomon Smith Barney, 5/30/2002, emphasis added]
>
> We reviewed the accounting treatment in question, and while it does appear aggressive, it is revealed in footnotes, and the amounts involved **would not materially change operating income**, in our assessment. [RBC, 5/29/2002, emphasis added]
>
> This is the result of a May 22 New York Times article that we believe left out pertinent details and may have had a political agenda targeting ex-CEO and current Vice President Dick Cheney. **The unapproved claims in question only total $98 million, less than 1% of total revenue.** [CIBC, 5/30/2002, emphasis added]
>
> We believe these accounting issues are largely a **non-event.** [Deutsche Bank, 5/30/2002, emphasis added]
>
> **Amounts at issue were modest**: HAL recognized $89 million in 1998 and $91 million in 1999 under this approach, both **less than 1% of revenues**. More importantly, when the company took a charge of $191 million in 2000 for uncollected claims at the e&c and oilfield construction businesses, only about $8 million ($0.01/share) were previously recognized as collectible. The estimate[s] therefore appear to have been only very modestly optimistic, and not out of line with the normal variance in percentage of completion estimates. [Deutsche Bank, 5/30/2002, emphasis added]
>
> Accounting Concerns Unwarranted, we believe. [Morgan Stanley, 5/30/2002]

144. In addition, the analysts commented that they believed the SEC investigation was prompted by a *New York Times* article published on May 22, 2002. There was no statistically significant price reaction after the *New York Times* article was published. See Exhibit 1 for details. The lack of price reaction to both the *New York Times* article and the announcement of the SEC investigation, along with the analyst commentary indicating that the accounting issues were "a non-event," are further indication that the alleged misrepresentations regarding accounting of unapproved claims had no price impact.

X. THERE IS NO PRICE IMPACT FROM THE ALLEGED MISREPRESENTATIONS REGARDING ASBESTOS

145. The Fund claims that throughout the class period Halliburton misrepresented its reported asbestos liability. As summarized in the table below, the Complaint alleges 25 dates on which Halliburton allegedly misrepresented its reported asbestos liability.[147]

Alleged Misrepresentations – Asbestos		
M1	7/22/99	Halliburton reported 2Q99 results and held earnings call.
M2	8/13/99	Halliburton filed its 2Q99 10-Q.
M3	9/13/99	Halliburton presented at Dain Rauscher Wessels conference.
M4	10/21/99	Halliburton reported 3Q99 results and held earnings call.
M5	11/15/99	Halliburton filed its 3Q99 10-Q.
M6	1/27/00	Halliburton reported 4Q99 results and held earnings call.
M7	3/14/00[148]	Halliburton issued its 1999 Annual Report.
M8	4/26/00	Halliburton reported 1Q00 results and held earnings call.
M9	5/15/00	Halliburton filed its 1Q00 10-Q.
M10	7/26/00	Halliburton reported 2Q00 results and held earnings call.
M11	8/10/00	Halliburton filed its 2Q00 10-Q.
M12	11/9/00	Halliburton filed its 3Q00 10-Q.
M13	1/30/01	Halliburton reported 4Q00 results and held earnings call.
M14	3/27/01[149]	Halliburton issued its 2000 Annual Report.
M15	4/25/01	Halliburton reported 1Q01 results.
M16	5/11/01	Halliburton filed its 1Q01 10-Q.
M17	5/25/01	Robinson-Humphrey issued report after discussions with management.

[147] Complaint, ¶¶108-190.

[148] *See* footnote 9.

[149] *See* footnote 10.

Alleged Misrepresentations – Asbestos		
M18	6/28/01	Halliburton announced Harbison-Walker claims could require an additional reserve of $60 million.
M19	7/25/01	Halliburton reported 2Q01 results and held earnings call.
M20	8/9/01	Halliburton filed its 2Q01 10-Q.
M21	8/22/01	Salomon Smith Barney, after discussions with the Company's management, issued a report on Halliburton's asbestos exposure, stating that "concerns appear to be overblown."
M22	9/4/01	*Platt's* reported, "Halliburton sees asbestos claims as 'manageable.'"
M23	10/4/01	Halliburton discussed the Company's asbestos liability situation at a Deutsche Bank seminar but allegedly did not disclose a recent $130 million verdict.
M24	10/23/01	Halliburton reported 3Q01 results and held earnings call, stating that "there have been no adverse developments" with respect to the Harbison-Walker situation.
M25	11/8/01	Halliburton filed its 3Q01 10-Q.

146. The Fund and Ms. Nettesheim claim there are seven partial corrective disclosures related to Halliburton's allegations regarding asbestos liability: June 28, 2001; August 9, 2001; October 30-November 1, 2001; December 4-5, 2001; and December 7, 2001.[150] The Complaint alleges only three corrective disclosures related to the reported asbestos liability: June 28, 2001; the beginning of December (which I assume relates to December 4, 2001);[151] and December 7, 2001.[152] The other four dates—August 9, 2001; October 30, 2001; November 1, 2001; and December 5, 2001—are found in the Nettesheim Reports.[153] The table below summarizes the dates on which the Fund alleges corrective disclosures.

Alleged Corrective Disclosures – Asbestos			Source
D7	6/28/01	Halliburton disclosed that Harbison Walker had asked for financial and asbestos claims management assistance.	Complaint & Nettesheim

[150] Complaint, ¶¶170, 191; Nettesheim Report, ¶¶114-132.

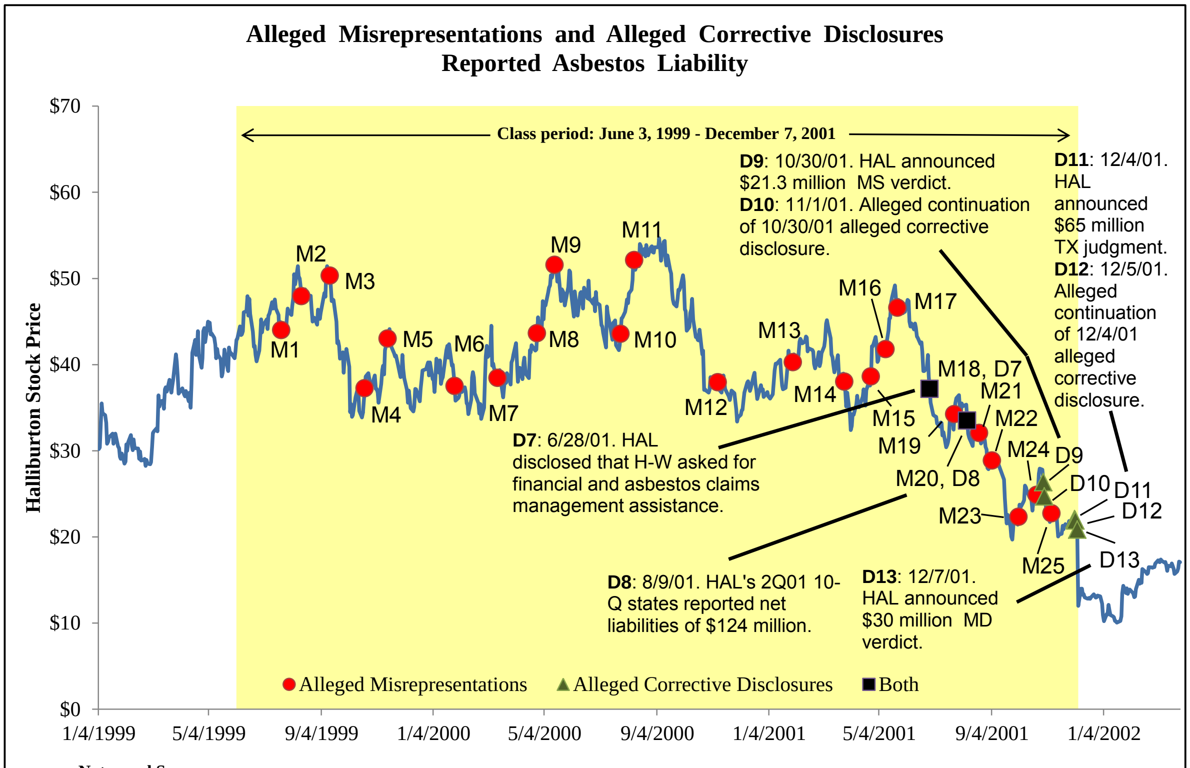
[151] Complaint, ¶191.

[152] Complaint, ¶¶170, 191.

[153] Nettesheim Report, ¶¶114-132.

		Alleged Corrective Disclosures – Asbestos	Source
D8	8/9/01	Halliburton's 2Q01 10-Q states that its reported net liability for known open asbestos claims is $124 million.	Nettesheim
D9	10/30/01	Halliburton announced $21.3 million Mississippi verdict.	Nettesheim
D10	11/1/01	Alleged continuation of 10/30/01 alleged corrective disclosure.	Nettesheim
D11	12/4/01	Halliburton announced Texas judgments.	Complaint & Nettesheim
D12	12/5/01	Alleged continuation of 12/4/01 alleged corrective disclosure.	Nettesheim
D13	12/7/01	Halliburton announced $30 million Maryland verdict.	Complaint & Nettesheim

147. The chart below shows Halliburton's stock price along with the alleged misrepresentations and alleged corrective disclosures related to the asbestos allegations.



Notes and Sources:
Price data collected from Factset Research Systems, Inc.
Alleged misrepresentations and alleged corrective disclosures aggregated from the Complaint and the Nettesheim reports.

148. There is no price impact from the alleged misrepresentations concerning Halliburton's reported asbestos liability. As discussed above, I found that after making the appropriate adjustment for multiple comparisons, there was no statistically significant price reaction after any of the alleged misrepresentations.

149. Before making an appropriate adjustment for multiple comparisons, only one date had a statistically significant positive movement: April 25, 2001, on which the Fund alleges Halliburton misrepresented its first quarter 2001 earnings.[154] The Complaint does not include any allegation that Halliburton made any specific misstatement regarding asbestos on that day. There was no mention of asbestos in the Company's press release announcing quarterly results. Halliburton briefly mentioned asbestos on its earnings call, stating that it was "adding about 18,000 [asbestos] cases for the first quarter."[155] Only one out of twelve analysts that issued reports on April 25 or April 26 discussed asbestos.[156] This analyst stated: "Asbestos outlook unchanged."[157] The analysts instead focused on a number of positive developments, including price increases in North America and improvement in the international oil market:

> The outlook for the remainder of the year is sharply stronger in all business segments led by HES. We are raising our estimates for 2001, 2002 and 2003. Rising international activity is the principal driver of the stronger outlook, especially in Latin America, Middle East and West Africa. [Salomon Smith Barney, 4/25/2001]
>
> Business trends and outlook comments by management support our thesis of a recovery of international activity becoming the principal driver of HAL'S earnings in 2H01 and thereafter. [CIBC, 4/26/2001]
>
> HAL is seeing strong improvement in HES in North America as a result of an 8-10% price increase early in the year and planned further price increases this summer. More importantly, the company is also seeing early signs of a strong recovery internationally, particularly in the Middle East Latin America and West Africa. [Deutsche Bank, 4/26/2001]

[154] Complaint, ¶161.

[155] Halliburton Conference Call, April 25, 2001.

[156] Twelve analysts issued a report on April 25 or April 26, 2001: Salomon Smith Barney, April 25, 2001; CIBC, April 26, 2001; Credit Suisse, April 26, 2001; Dain Rauscher Wessels, April 26, 2001; Deutsche Bank, April 26, 2001; Dresdner, April 26, 2001; Lehman Brothers, April 26, 2001; Morgan Stanley, April 26, 2001; PNC, April 26, 2001; Prudential, April 26, 2001; Robinson Humphrey, April 26, 2001; and UBS Warburg, April 26, 2001.

[157] Deutsche Bank, April 26, 2001.

> The continued strength in the North American oilfield environment, improved pricing, and a recovering international market for oilfield-related activity should materially impact HAL'S operating results. [Prudential, 4/26/2001]

150. In addition, there were no statistically significant price reactions after any of the following alleged corrective disclosures:

- 06/28/2001 (after making the appropriate adjustment for multiple comparisons);
- 08/09/2001 (after making the appropriate adjustment for multiple comparisons);
- 10/30/2001 (after making the appropriate adjustment for multiple comparisons);
- 11/01/2001 (after making the appropriate adjustment for multiple comparisons);
- 12/04/2001 (both before and after making the appropriate adjustment for multiple comparisons); and
- 12/05/2001 (both before and after making the appropriate adjustment for multiple comparisons).

151. For purposes of discussion, I have grouped the alleged misrepresentations into three sections: 1) Section A (¶¶152-280) addresses the alleged misrepresentations concerning Halliburton's reported asbestos liability (including its reserves for pending claims, its receivables from insurance companies for those claims, and its asbestos liability net of insurance receivables). 2) Section B (¶¶281-300) addresses the alleged misrepresentations concerning the risks that the former subsidiary, Harbison-Walker, would not be able to satisfy its indemnification obligation for certain asbestos claims. 3) Section C (¶¶301-306) addresses the alleged misrepresentations on an October 23, 2001 conference call with analysts.

A. There is no price impact from the alleged misrepresentations regarding Halliburton's reported asbestos liability

Alleged Misrepresentation	Alleged Corrective Disclosure
Halliburton misrepresented its reported asbestos liability.	Halliburton announced on October 30, 2001 an adverse verdict rendered on October 25, 2001 in Holmes County, Mississippi. Halliburton announced on December 4, 2001 adverse judgments rendered on November 29, 2001 in Orange County, Texas. Halliburton announced on December 7, 2001, an adverse verdict rendered on December 5, 2001 in Baltimore, Maryland.

152. As detailed below, I found no price impact from the alleged misrepresentations regarding Halliburton's reported asbestos liability. Halliburton disclosed detailed information about its estimated asbestos liability and, contrary to the Fund's implications, it was clear that the Company estimated and reported asbestos liability for pending claims, not future claims. Moreover, Halliburton warned investors that a series of adverse rulings could have a material adverse effect on the Company.

153. The Company's estimates of its asbestos liability depended on the average historical cost to settle or dispose of claims. During the class period, there was no negative trend in this key metric and Halliburton's average cost remained low relative to other companies. Moreover, the Company's reported asbestos liability net of insurance did not change after the end of the class period and analysts did not express surprise at this lack of change in reported numbers. The fact that analysts did not comment or express any surprise that the Company's net asbestos liability was unchanged means that the alleged corrective disclosures could not have disclosed to the market that the prior reported asbestos liability was understated or misleading.

154. According to market commentary, Halliburton was particularly forthcoming regarding its reported asbestos liability throughout the class period. After the last alleged corrective disclosure, analysts did not indicate any belief that Halliburton had misled the market, and the analysts continued to think Halliburton was effectively managing its asbestos liability.

1. Halliburton publicly disclosed detailed information about its estimated asbestos liability, including making clear that the Company estimated and reported asbestos liability for pending claims, not future claims

155. Halliburton disclosed detailed information about its estimated asbestos liability. Throughout the class period, Halliburton disclosed that its estimates were based on the number of open claims pending against the Company at that time and Halliburton's historical experience with similar claims. The Company's SEC filings detailed information including: 1) the number of open asbestos claims pending against the Company; 2) the historical number of claims that had been settled or otherwise disposed of; 3) the number of new claims filed; 4) the gross cost (before insurance recoveries) of the claims that had already been settled or otherwise disposed of; and 5) the average historical cost to dispose of each claim.

156. Halliburton also disclosed in its SEC filings an estimate of the amount it expected to recover from insurance for the pending asbestos claims. According to the filings, these estimates were based on agreements Halliburton had reached with some carriers, its historical experience, and its understanding of disputes raised by certain carriers. The Company's SEC filings included the following information: 1) the historical net amount the Company actually paid after insurance recoveries; 2) its estimate of the amount it would recover for claims that were still pending; and 3) discussion of disputes with certain insurance carriers.

157. Though Halliburton "believe[d] that the open asbestos claims asserted against [it] w[ould] be resolved without a material adverse effect,"[158] it also repeatedly disclosed that there was uncertainty surrounding its reported estimates of its asbestos liability. For example, in Halliburton's 2000 10-K, the Company stated:

> We recognize the uncertainties of litigation and **the possibility that a series of adverse court rulings** or new legislation affecting the claims settlement process **could materially impact the expected resolution of asbestos related claims.** [2000 10-K, filed on 3/27/2001, emphasis added]

158. Contrary to the Fund's implication, Halliburton did not estimate or report liability for its future asbestos claims but only reported estimated liability for pending, or open, claims. Halliburton made clear throughout the class period that it estimated its asbestos liability only for

[158] Complaint, ¶ 189.

currently pending asbestos claims. These estimates did not include amounts for asbestos claims that would be filed in the future.[159]

159. The Company disclosed in its SEC filings that the reported asbestos liability was for pending claims. For example, in Halliburton's first quarter 2001 10-Q, the Company stated:

> At March 31, 2001, there were about 129,000 open asbestos claims asserted against us, including about 26,000 associated with insurance recoveries we expect to collect from Highlands. Open claims at March 31, 2001 also include 15,000 claims for which settlements are pending […] We have accrued reserves for our estimate of our liability for known asbestos claims that have been asserted against us. Our estimate of the cost of resolving asserted asbestos claims is based on our historical litigation experience, our prior completed settlements and our estimate of amounts we will recover from insurance companies […] Our reserves for open asbestos claims and corresponding estimated insurance recoveries included in noncurrent assets are as follows:

Millions of dollars	March 31 2001	December 31 2000
Accrued liability for open claims	$ 84	$ 80
Estimated insurance recoveries:		
Highlands Insurance Company	(40)	(39)
Other insurance carriers	(14)	(12)
Net liability for known open asbestos claims	$ 30	$ 29

[159] The Fund, in its Supplemental Responses to Halliburton's Second Set of Interrogatories, claims that the Company made statements about liabilities for claims other than pending by citing a Jefferies analyst report on January 31, 2001 that stated "management reiterated that prospective asbestos liabilities . . . should have minimal adverse impact on company going forward." The same analyst used the term, "prospective asbestos liabilities," in a prior report in which the context makes clear that the language is not referring to asbestos claims filed in the future:

> "However, management reiterated several times that the prospective asbestos liabilities had not changed materially from the second quarter and should have minimal adverse impact on the company going forward. (At the end of the 2Q 260,900 claims had been filed against Halliburton's current and former divisions and subsidiaries and the company had settled approximately two thirds of the claims at a total cost of $99 million and all but $23 million was covered by Insurance.)" [Jefferies, October 25, 2000]

Moreover, this analyst report is discussing the prior day's earnings announcement and conference call. In the conference call, management clearly stated that they were not talking about future asbestos liabilities and that the 3Q pending claims are not materially different than the 2Q pending claims:

> "We don't think you're going to see any material change in that disclosure in the third quarter versus the second quarter. And I mean, you know, as to proving what might or might not happen in the future, we can't get into this predicting but we felt strongly that we needed to tell the street today that, you know, the second quarter disclosure details it all. Third quarter's going to have some minor changes in the numbers that we see but nothing that materially impacts the trends or the values of anything that you've seen so far in our asbestos litigation." [Halliburton Conference Call, October 24, 2000]

> …[W]e believe that the open asbestos claims asserted against us will be resolved without a material adverse effect on our financial position or results of operations. [10-Q, filed on 5/11/2001]

160. Similar language had been used in the Company's SEC filings before the class period and as far back as October 1998, shortly after the completion of the Dresser merger.[160]

161. Halliburton first disclosed estimates of asbestos liability for *future* claims, more than eight months after the end of the class period in August 2002.[161] At that point, the Company had "sufficient information to make a reasonable estimate of future claims."[162]

162. In 2002, after the class period, other public companies with asbestos exposure had a similar change in their asbestos disclosures – going from reporting estimates for only pending claims to reporting estimates for both pending and future claims. For example, Albany International reported during the class period that "while the Company anticipates that additional claims may be filed, it cannot control or predict the number or timing of future claims."[163] Eight months after the end of the class period, on August 14, 2002, Albany International reported reserves for future claims for the first time.[164] This was the day after Halliburton disclosed estimates including future claims for the first time.

163. Similarly, 3M, Georgia Pacific, Allegheny Energy, Quaker Chemical, and General Cable Corp. estimated reserves for pending claims during the class period but did not start projecting and reserving for future asbestos claims until after the end of the class period.[165]

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[160] *See* Halliburton Form 8-K, filed on October 23, 1998; Halliburton 1998 Form 10-K, filed on March 23, 1999.

[161] *See* Halliburton Form 10-Q, filed on August 13, 2002.

[162] Halliburton included the following language in its 2001 Form 10-K, filed on March 12, 2002:

> Uncertainty about future asbestos claims and jury awards has caused much of the recent volatility in our stock price and recent downgrades in our credit ratings. We have not accrued reserves for unknown claims that may be asserted against us in the future. We have not had sufficient information to make a reasonable estimate of future claims. However, we recently retained a leading claim evaluation firm to assist us in making an estimate of our potential liability for asbestos claims that may be asserted against us in the future. When the evaluation firm's analysis is completed it is likely that we will accrue a material liability for future claims that may be asserted against us. We expect the analysis will be completed during the second quarter of 2002 and that we will accrue the liability at the end of the quarter.

[163] Albany International Form 10-Q, filed November 13, 2001.

[164] Albany International Form 10-Q, filed August 14, 2002.

[165] *See* Forms 10-Q and 10-K filed in 2001 to 2003 for 3M, Georgia Pacific, Allegheny Energy, Quaker Chemical, and General Cable Corp. 3M disclosed reserves for pending claims in its Form 10-Q filed November 13, 2001 and reserves for future claims starting on March 11, 2002 in its Form 10-K filing. Georgia Pacific disclosed that it estimated reserves for pending claims in its Form 10-Q filed on November 5, 2001 and reserves for future claims starting on March 22, 2002 in its Form 10-

164. Note, some companies did explicitly report reserves that included amounts for future claims during the class period. For example, ABB reported on April 3, 2001 that its reserve of $430 million is "based on historical data and estimates of asbestos claims that might be made in the future."[166] Another company, Crown Cork & Seal reported on November 14, 2001 that its "accrual of $420 [million] recorded at December 31, 2000 for asbestos claims constituted management's best estimate at that time of such costs for pending and future claims that were probable and estimable."[167]

165. Analyst commentary shows that the market was aware of the Company's approach to its estimation of its asbestos liability and that the estimates were solely for its currently pending claims. For example:

> More important, Halliburton believes that insurance should cover most of the litigation costs or settlements and **Halliburton has established reserves to cover liabilities for known asbestos claims.** [Jefferies, 10/9/2000, emphasis added]
>
> Asbestos claims declined to 13,000 from 27,000 in Q2 2001 and 11,000 claims were settled during the quarter. **HALs reserves for all open asbestos claims** rose to $704 million from $699 million, and its estimated insurance recoveries rose to $579 million from $575 million. Hence, the company's estimated net exposure rose by $1 million to $125 million. [Wachovia, 10/24/2001, emphasis added]
>
> The second quarter charge was taken to reserve for the potential that H-W may fail to fulfill its responsibility due to financial constraints. The **charge was figured by taking the best estimate of the H-W cases still outstanding and multiplying by its historical settlement rate and insurance recovery rate.** [Salomon Smith Barney, 11/9/2001, emphasis added]

2. According to market commentary, the Company was particularly forthcoming regarding its asbestos liability during and after the class period

166. Analysts and news stories commented positively that Halliburton was particularly forthcoming regarding its asbestos liability during the class period. This positive commentary

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K filing. Quaker Chemical disclosed that it made accruals for pending claims in its Form 10-K filed on March 29, 2001 and reserves for future claims starting on March 28, 2003 in its Form 10-K. General Cable disclosed reserves for pending claims in its Form 10-K filed March 30, 2001 and reserves for future claims starting on February 20, 2004 in its Form S-3/A filing. Allegheny Energy disclosed reserves for pending claims in its Form 10-Q filed on August 14, 2001 and reserves for future asbestos claims starting on March 11, 2004 in its Form 10-K filing.

[166] ABB, Form 20FR12B, filed April 3, 2001.

[167] Crown Cork & Seal, Form 10-Q, filed November 14, 2001.

continued after the end of the class period, refuting the Fund's theory that the alleged corrective disclosures revealed to the market that Halliburton's prior statements concerning its reported asbestos liability were false. For example:

> While we are still modestly concerned about the asbestos litigation, **we believe the company has fairly disclosed all the relevant data**... [ABN, 4/30/2001, emphasis added]

> The "asbestos issue" first became a focus of investor attention for Halliburton late in 2000. Although **the company had been routinely disclosing its claims and settlement activity**, the issue was not a factor of significance before that time. [Salomon Smith Barney, 8/22/2001, emphasis added]

> The **company gave a detailed review of its asbestos situation**.... [UBS Warburg, Oilfield Services, 10/24/2001, emphasis added]

> **Halliburton's exposure to asbestos liabilities has been well documented over the last year.** Indeed, it has been a large factor in our Neutral rating during times of very solid company performance. [RBC, 12/10/2001, emphasis added]

> We believe there are no indications that the suits filed against the company are spiraling out of control and we believe **HAL management has been very forthright with the pending litigation procedures while aggressively managing the risk with appropriate reserves and the appeals process**. [SunTrust Robinson Humphrey, 12/10/2001, emphasis added]

> **I think it's really important to recognize that management has been very, very forthcoming and proactive in getting disclosure out to investors** on the asbestos situation as it has been developing. [Salomon Smith Barney analyst on CNN, 12/10/2001, emphasis added]

> Halliburton, and Dresser before it, **has consistently reported periodic developments associated with its asbestos liabilities**, in both its quarterly SEC filings and, when applicable, through press releases. [Salomon Smith Barney, 12/11/2001, emphasis added]

> In addressing the issues, Dow Chemical […] and Halliburton […] couldn't be further apart […] [Dow] hasn't mentioned asbestos litigation in either its own financial reports or those of its Union Carbide unit, which files separate reports [...] **By contrast, Halliburton spends more than four pages of its financial filings giving the history and background of its asbestos litigation, […] [as well as] outlining its strategy and its estimated liabilities.** [*WSJ*, 2/11/2002, emphasis added]

3. The disclosures and analyst commentary before and after the alleged corrective disclosures demonstrate the absence of price impact

a. After the last alleged corrective disclosure, no analyst indicated that Halliburton had misled the market, and the analysts continued to indicate that Halliburton was effectively managing its asbestos liability

167. The Fund claims that after the December 7, 2001 alleged corrective disclosure, when Halliburton reported adverse litigation results in certain pending cases, investors "instantly realized that the Company had been affirmatively misleading them in its assurances regarding the Company's asbestos exposure."[168] However, none of the analysts covering Halliburton indicated after the Company's announcement on December 7, 2001 that they had been misled. On the contrary, analysts continued to think, after the end of the class period, that Halliburton was effectively managing its asbestos liability:

> We believe management is proactively managing this issue [asbestos]… We anticipate continued full disclosure on the issue by the company in the future. [A.G. Edwards, 12/10/2001]
>
> Halliburton employs an effective and aggressive legal strategy to defend its asbestos liabilities. [Jefferies, 12/10/2001]
>
> Halliburton's exposure to asbestos liabilities has been well documented over the last year. [RBC, 12/10/2001]
>
> Although we do not pretend to have legal insight into the outstanding litigations, **we believe that HAL has set aside substantial reserves**, has a solid balance sheet, and healthy cash flow, **to enable the company to absorb negative judgements [sic] against the company well in excess of estimated claims outstanding at this time.** [SunTrust Robinson Humphrey, 12/10/2001, emphasis added]
>
> We believe the sell-off was overdone and that the asbestos litigation, **which has been effectively handled by the company since 1976**, will not materially impact HAL's future financial condition. [CIBC, 12/11/2001, emphasis added]
>
> In the past six months, Halliburton shares have been under nearly constant pressure as investors first soured on the outlook for oilfield service companies and then really hammered the stock based on perceptions that Halliburton's asbestos related liabilities would be building to a point that threatened Halliburton's

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[168] Complaint, ¶39.

> financial viability. **We do not agree that Halliburton's viability is really in question**, **but we do understand where the concern and the fear comes from and we also understand the reluctance of investors to make a bet on an issue that is so difficult to game as asbestos**. Based on the known risks and liabilities, we think that Halliburton shares are significantly undervalued, but we retain our Hold rating due to our inability to quantify the unknown risks and future liabilities that could arise from pending asbestos related litigation. [UBS, 1/24/2002, emphasis added]
>
> The company will still have about 70,000 claims related to exposure for employees working for its Kellogg Brown & Root subsidiary. **These claims have been handled extremely well under Halliburton's management** and have been settled for about $200 per claim, after insurance reimbursement. [CIBC, 2/15/2002, emphasis added]
>
> **HAL has a better track record in managing asbestos claims**. Historically, HAL's gross settlement cost per claim (before insurance payment) has averaged $720, while for Harbison the comparable number is about $6,500. With increased cooperation between HAL and Harbison, **we expect lower costs going forward.** [Jefferies, 2/15/2002]

168. Note the Complaint quotes a couple of phrases from a December 7, 2001 post to TheSteet.com that are not consistent with analyst commentary. In particular, the Complaint states: "TheStreet.com reported: 'Halliburton Buried as Investors Stop Believing': Halliburton's shares dove to nine-year lows Friday as investors lost faith in the company's claims…'."[169]

169. The Complaint does not complete the sentence that, in full, reads "Halliburton's shares dove to nine-year lows Friday as investors lost faith in the company's claims that asbestos litigation would never catch up with it."[170] I found no evidence that the Company ever made a statement that "asbestos litigation would never catch up with it" and the Complaint does not allege that the Company made such a representation.

170. TheStreet.com is not an analyst report and there is no indication that it was authored by an analyst specifically following Halliburton. (In fact, there is no named author.) The article consists of only six sentences and contains no analysis or support for the quoted statements.

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[169] Complaint, ¶39.

[170] "Halliburton Buried As Investors Stop Believing," *TheStreet.com*, December 7, 2001.

171. The parts of the post quoted by the Complaint are inconsistent with contemporaneous analyst reports and other market commentary. The quotes and the Fund's interpretation of their meaning are also inconsistent with the fact that Halliburton disclosed the possibility of a series of adverse litigation results that could have a material impact on the Company's financial position. The Fund's assertion that this article supports its claim that it was "clear to all" that the $125 million accrued liability was "grossly inadequate"[171] is directly contradicted by the contemporaneous analyst commentary, as well as by the fact that analysts did not comment or express any surprise that the Company's reported $125 million in net liability the quarter after this alleged corrective disclosure.

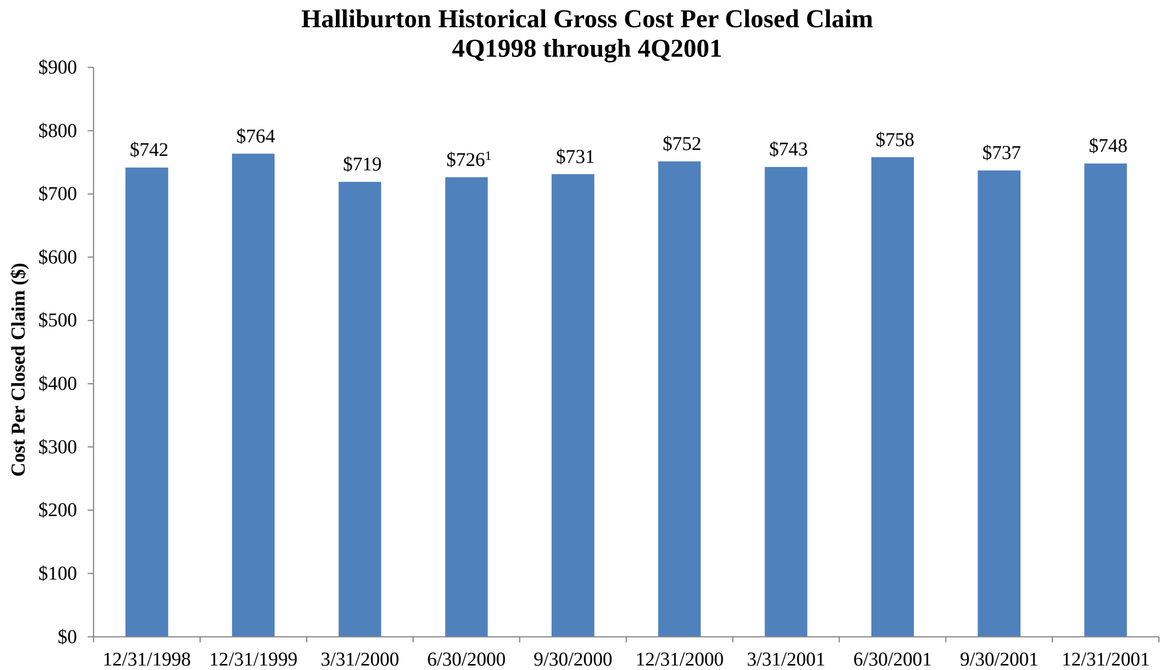
b. Halliburton's average cost per claim did not change substantially during the class period, and remained low relative to other companies

172. Halliburton's average cost per settled or otherwise disposed of claim remained steady throughout the entire class period, and actually decreased slightly during 2001. According to its SEC filings, Halliburton settled or disposed of approximately 36,000 claims in 2001 at a gross cost of $26 million, or $722 per claim.[172] By comparison, Halliburton's historical average cost per claim was $752 as of December 31, 2000, and $764 as of December 31, 1999.[173] The chart below shows Halliburton's historical cost per closed claim each quarter from the fourth quarter of 1998 through the fourth quarter of 2001.

[171] Complaint, ¶39.

[172] Halliburton 2001 Form 10-K, filed March 12, 2002, pp. 48-49; Halliburton 2000 Form 10-K, filed March 27, 2001, p.37.

[173] As of December 31, 2000, Halliburton had settled approximately 165,000 claims since 1976 at a gross cost of $124 million. Halliburton 2000 Form 10-K, filed March 27, 2001, p.37. As of December 31, 1999, Halliburton had settled approximately 129,650 since 1976 at a gross cost of $99 million. Halliburton 1999 Form 10-K, filed March 14, 2000, p.44.



Notes and Sources: Data from Halliburton's SEC filings. Cost per closed claim is calculated by dividing the cumulative gross cost of all closed claims since 1976 by the cumulative number of claims closed since 1976 (not including post-1992 Harbison-Walker claims). Insurance recoveries are not included.
[1] Data were unavailable for Halliburton's cumulative gross cost of all closed claims for this period. We calculated Halliburton's historical gross cost per closed claim for this period using the cumulative gross cost of all closed claims as of the period immediately before and after, and interpolating based on the number of claims closed in each period.

173. Analysts mentioned that Halliburton’s cost per settled or otherwise disposed of claim remained at historical values during and after the class period.

> Halliburton had been settling claims for less than $25 million per year in gross payout, **with no identifiable trend**, and had been recovering around 70% from insurers and carried a modest net liability on the balance sheet of around $30 million. [Salomon Smith Barney, 8/22/2001, emphasis added]

> During the quarter, the rate of new asbestos litigation claims filed declined to 13,000 from 27,000 in 2Q2001 and **11,000 claims were settled at close to the historic settlement cost.** [A.G. Edwards, 10/23/2001, emphasis added]

> [C]laims continue to be settled and/or paid at levels near HAL’s historical net cost of less than $200/claim [net of insurance recoveries]. [Deutsche Bank, 10/24/2001]

> Claims filings in the current quarter continue to show the slowdown trend seen in the third quarter and **the company continues to dispose of cases at or near its historical settlement costs**. [UBS Warburg, 12/10/2001, emphasis added]

> Importantly, **Halliburton’s cumulative gross cost per claim has been flat to down over the past several years**…**which is not typical of other large asbestos defendants, we believe**. [Morgan Stanley, 1/29/2002, emphasis added]

174. Halliburton's historical cost per claim was much lower than most other companies that had asbestos liability, even after the end of the class period.[174] Morgan Stanley analyzed this issue in a report on Halliburton issued after the end of the class period:

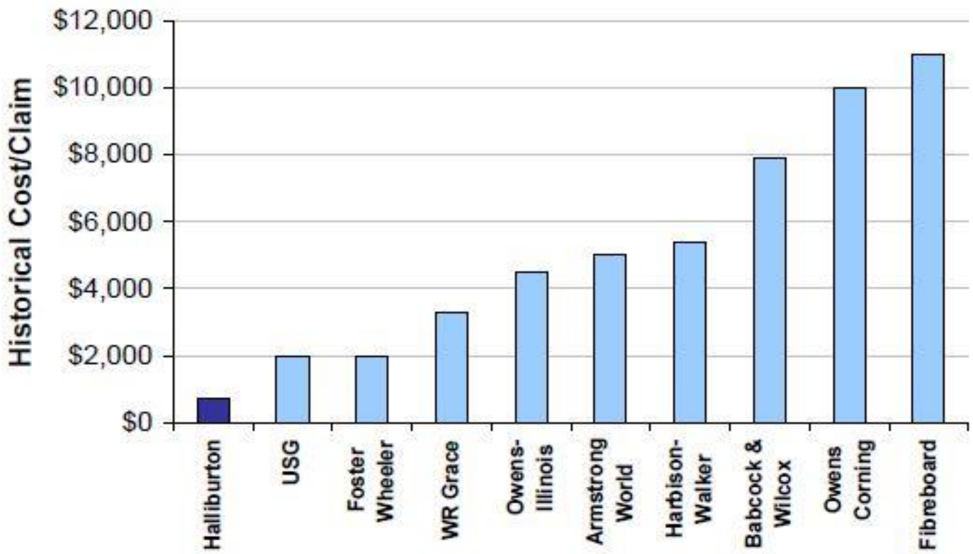
> Obviously, one of the more critical variables in estimating Halliburton's total asbestos exposure is the cost per claim associated with disposing of the claims that are filed against it. **Historically, Halliburton has paid out much less on a per claim basis than most of the other well known asbestos defendants (see Exhibit 13).** [Morgan Stanley, 1/29/2002, emphasis added]

Below is the chart from the Morgan Stanley analyst report.

Chart from Morgan Stanley Analyst Report Dated January 29, 2002

Exhibit 13

Cost/Claim Comparison



Source: Morgan Stanley Estimates, Company data

[174] In addition, during the class period, analysts also commented that Halliburton's historical cost per claim was much lower than most other companies that had asbestos liability. *See*, for example, Jefferies, November 13, 2000. ("Halliburton's average settlement per claim is still way below the $20,000 or $30,000 per claim being paid out by other companies (such as Owens Corning) with more significant asbestos liabilities.")

4. The net asbestos liability that the Company reported after the end of the class period was unchanged and analysts did not express any surprise

175. The Company's asbestos liability net of insurance receivables did not change in the quarterly announcement following the end of the class period. Halliburton's estimated net asbestos liability at the end of the fourth quarter of 2001, announced January 23, 2002, over a month after the end of the class period, was $125 million, the same number reported in the prior quarter.[175]

176. The fact that analysts did not comment or express any surprise that the Company's net asbestos liability was unchanged demonstrates that the alleged corrective disclosures could not have disclosed to the market that the prior reported asbestos liabilities were understated or misleading. If analysts believed that the December verdict announcements revealed that Halliburton's previously disclosed estimates were wrong and misleading, they would have been surprised by the lack of change in the following quarter.

177. When the fourth quarter and year end 2001 net asbestos liabilities were announced on January 23, 2002 there was no commentary by the market suggesting that these amounts were misleading or incorrect even though these numbers were the same as the prior quarter's net asbestos liability (*i.e.*, these numbers were the same as the net asbestos liability booked in the quarter *before* Halliburton's press releases about the verdicts). The fact that the analysts did not comment or express any surprise when Halliburton announced net asbestos liability that was unchanged is direct evidence that 1) the alleged corrective disclosures could not have disclosed to the market that the prior estimates of reported asbestos liability were understated or misleading and 2) there is no price impact from the alleged misrepresentations regarding Halliburton's reported asbestos liability.

5. The verdict announcements offer no support to the Fund's claim of price impact and demonstrate lack of price impact from the alleged asbestos misrepresentations

178. The evidence discussed in the section above demonstrates that the alleged misrepresentations concerning Halliburton's disclosed asbestos liability had no price impact. The

175 *See* Halliburton Conference Call, January 23, 2002.

evidence concerning the alleged corrective disclosures (which relate to the announcement of adverse verdicts and judgments in asbestos cases) also demonstrates the absence of price impact.

179. Other than the Harbison-Walker related announcements, which I address below, the only events the Fund claims are corrective of the alleged fraud regarding asbestos are the announcements in late 2001 regarding verdicts. These announcements related to three verdicts in Texas, Mississippi, and Maryland, which are summarized in the table below:

Asbestos Verdicts
($ in millions)

Verdict Date	Location	Total Verdict	Co Defendants	Halliburton Verdict Share	Number of Plaintiffs	Alleged Disease
9/12/2001	Texas	$130	NARCO (Honeywell)	$65	5	Lung Cancer, Colon Cancer, Asbestosis
10/26/2001	Mississippi	$150	3M, AC&S	$21	6 [1]	Asbestosis
12/5/2001	Maryland	$40	AP Green, AC&S	$30	5	Mesothelioma

Notes:
[1] Halliburton's subsidiary Dresser Industries was defendant in two of the six claims.

180. The Fund and its expert allege that corrective disclosures of the alleged asbestos misrepresentations occurred on the following days: October 30, 2001 (and the November 1, 2001 alleged continuation of the disclosure), December 4, 2001 (and the December 5, 2001 alleged continuation of the disclosure) and December 7, 2001.

181. However, these announcements contained no new information regarding the Company's alleged misrepresentations (including any alleged misrepresentation about the Company's expected insurance recovery for asbestos claims). As discussed below, the Company had disclosed and the market understood that there was a risk of adverse verdicts from its "aggressive" strategy of defending asbestos claims. The only potential new information is the litigation result itself—such as the actual verdict or judgment. But as discussed further below, several of the announcements of verdicts or judgments that the Fund claims are corrective were actually announced earlier to no reaction. Even after the adverse verdicts were announced, analysts still commented positively on the Company's strategy and believed that there was a

good possibility the verdicts would be overturned or adjusted and, regardless of outcome, primarily covered by insurance.

182. The Fund claims that the first of these verdicts, the Texas verdict on September 12, 2001, was "stunning confirmation" that Halliburton's prior statements regarding its asbestos exposure were "completely false."[176] Yet, I found there was no price reaction after the public announcement of this verdict, and therefore no price impact. I similarly found no price reaction to the public announcement of the Mississippi verdict or the Texas judgment.

183. Moreover, as discussed in the next section, I found the stock decline at the end of the class period was attributed to an increase in uncertainty and change in the economic and asbestos environment that also affected other companies. I found that analysis of other companies with asbestos exposure demonstrated that Halliburton's price decline at the end of the class period was due to changing conditions and not the alleged fraud.

a. Halliburton's risk of adverse asbestos verdicts was disclosed to and known by the market

184. There is no price impact from the alleged failure to disclose the risk that verdicts such as those occurring in late 2001 could occur because the risk of adverse asbestos verdicts was disclosed to the market before the class period. Moreover, there was no price reaction or analyst commentary when Halliburton first discussed this risk. In an efficient market, corrective information should affect the market when first disclosed[177] and if there is no price reaction, that is direct evidence that the alleged misinformation had no price impact.

185. The Company disclosed the risk of adverse asbestos verdicts on October 23, 1998, before the beginning of the class period. The Company's October 23, 1998 8-K filing stated in its asbestos litigation section that:

> **Management recognizes the uncertainties of litigation and the possibility that a series of adverse rulings could materially impact operating results.** However, based upon the Company's historical experience with similar claims, the time elapsed since the Company discontinued sale of products containing asbestos, and management's understanding of the facts and circumstances that

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[176] Complaint, ¶182.

[177] *See*, for example, Richard A. Brealey, Stewart Myers & Franklin Allen, *Principles of Corporate Finance* (McGraw-Hill: New York, 11th ed., 2014), 321-341.

> gave rise to such claims, management believes that the pending asbestos claims will be resolved without material effect on the Company's financial position or results of operations. [Form 8-K, filed on 10/23/1998, emphasis added]

186. There was no price reaction following this disclosure, and no analyst or news story discussed the announcement of the risk.

187. After, this date, the risk of adverse asbestos verdicts was repeatedly disclosed by the Company in numerous filings before and during the class period, including in its 1998 10-K, 1999 10-K, and 2000 10-K.

b. The market knew during the class period that Halliburton's "vigorous" strategy of defending asbestos claims created the risk of adverse verdicts

188. During the class period, analysts commented positively on Halliburton's "aggressive" strategy to fight claims:

> Asbestos issue is marginal: HAL currently has accrued $50 MM of asbestos liability, which is miniscule, compared to recent problem cases like MDR. There are a number of differences between the 2 that cause this liability to be small. These include the fact that Dresser spun off this business to Global Industrial Technologies several years back, used finished (not raw) asbestos and **aggressively litigated claims**. [Donaldson Lufkin Jenrette, 4/5/2000, emphasis added]

> One of the reasons Halliburton decided to step in and defend itself on the claims filed against Harbison-Walker since 1992, was its belief that Harbison was not providing adequate defense and was settling its claims at too high a cost. Since a significant majority of Halliburton's defense costs are covered by insurance**, its defense strategy is one of the most aggressive in the industry. This is one of the reasons why its settlement costs per claim is so much lower than those of other defendants**. **If Halliburton is successful in executing this strategy vis-a-vis the Harbison-Walker claims, then investors should feel more comfortable that the company can limit the future potential liability and perhaps even shrink the current liability on its balance sheet**. [UBS, 10/24/2001, emphasis added]

189. Analysts following the Company also understood that litigation brought with it uncertainties, and that Halliburton's strategy could result in adverse verdicts:

> **[T]he pending asbestos litigation remains unresolved, and it could severely impact the company financially if punitive damages are rewarded to plaintiffs.** [ING Barings, 10/25/2000, emphasis added]

> **The inherent uncertainty of litigation as well as the possibility of a series of adverse court rulings** or new legislation could quickly alter HAL's position, **makes it very difficult for the company [to] accurately predict the outcome**. [A.G. Edwards, 8/10/2001, emphasis added]
>
> Given that some of Halliburton's asbestos cases will end up being tried in court, the **company always runs the risk of losing and being hurt with large jury awards**. [UBS Warburg, 10/24/2001, emphasis added]

190. After the class period, analysts continued to comment positively on Halliburton's "aggressive" strategy to fight claims, even though it had resulted in adverse verdicts and could continue to result in adverse verdicts in the future. For example, the Morgan Stanley analyst discussed in detail Halliburton's "aggressive" strategy to fight claims, including its success in getting claims dismissed and the risk of adverse verdicts:

> **Halliburton's willingness to contest claims it views as weak does leave it vulnerable to occasional negative jury verdicts, although we like the company's strategy in handling the issue.** As a result, the newsflow related to asbestos is inherently asymmetrical, which makes the company's strategy appear more risky than it is, in our view. Large negative verdicts grab headlines; there are no headlines related to the 40–50% of claims that Halliburton closes without paying a penny to claimants
> […]
> Unlike many asbestos defendants […] Halliburton continues to aggressively assert a defense against a significant number of the claims filed against it. **We believe Halliburton's approach to managing its asbestos liabilities is both prudent and appropriate and is the best option available to it.** The mass settlement programs employed by numerous other asbestos defendants have generally led to an increase in claims and liability for those employing them
> […]
> Halliburton has managed to close 40% of its refractory-related claims and 50% of its non-refractory claims without any payment to Plaintiff. **The downside to the legal strategy employed by Halliburton is that it exposes the company to adverse trial court decisions**. [Morgan Stanley, 1/29/2002, emphasis added]

191. Other analysts also commented positively after the end of the class period on Halliburton's asbestos litigation strategy:

> **HAL's aggressive defense strategy intact** and vigorous appeals expected – Bankruptcy risk very low given strong financial position… Despite the recent negative jury awards, Halliburton is **committed to continuing to pursue a vigorous defense strategy** in fighting the pending asbestos claims and any future

> asbestos claims… **[W]e believe management is proactively managing this issue**. [A.G. Edwards, 12/10/2001, emphasis added]
>
> **Halliburton employs an effective and aggressive legal strategy to defend its asbestos liabilities.** The company has historically settled majority of its cases at reasonable amounts. Since 1976, the company has resolved approximately 194,000 claims at an average cost, after expected insurance reimbursement, of less than $200 per case. In the most serious asbestos cases involving mesothelioma (lung cancer), Halliburton has faced 400 claims since last year, with an average cost of $12,500 per case (prior to 3 recent decisions). [Jefferies, 12/10/2001, emphasis added]
>
> Moody's downgrades Halliburton's long-term ratings […] [and] is maintaining a negative outlook on Halliburton's ratings in light of the risk that the company's asbestos-related costs could rise in the future. **Moody's noted that Halliburton has maintained a solid track record in managing its claims despite the recent adverse jury verdicts**, that it has substantial insurance coverage, and that its asbestos-related liabilities have not altered its business prospects. [Moody's, 1/23/2002, emphasis added]
>
> **Halliburton's track record in court has been very good.** [SunTrust Robinson Humphrey, 1/28/2002, emphasis added]

192. Not only did Halliburton disclose the risk of adverse asbestos verdicts to no price reaction or market commentary before the class period, but analysts, throughout and after the class period, commented positively on Halliburton's "aggressive" strategy to fight claims even though it created the risk of adverse verdicts. The fact there was a risk of adverse verdicts was known and disclosed to no price reaction or market commentary. The strategy of defending asbestos claims aggressively was known to the market and considered a good strategy even after the end of the class period. Thus, there is no price impact from any alleged misrepresentation regarding the strategy or risks for handling asbestos claims.

c. The lack of price reaction following the large Texas verdict demonstrates that the information the Fund claims is corrective actually had no price impact; moreover, the verdict itself is not corrective of the alleged fraud

193. The Fund claims that the September 12, 2001 Orange County, Texas verdict for $130 million was a "stunning confirmation" that Halliburton's prior statements regarding its asbestos exposure were "completely false."[178]

194. If the Fund's claim is true—that the alleged misrepresentations regarding asbestos impacted Halliburton's stock and that this verdict was "stunning confirmation" that the prior statements were "completely false"—then one would expect to see a negative stock price reaction to the first public disclosure of this verdict. Yet, there was no such reaction by the market. There was no statistically significant price reaction to the public announcement of this verdict.

195. The earliest published news story I found of the Texas verdict was a September 20, 2001 article printed and posted on the website of *The Beaumont Enterprise*, the Hearst Corporation daily newspaper covering Orange County, Texas. The article was titled "Orange jury set record for damages in asbestos lawsuit" and reported that Dresser, Halliburton's subsidiary, was one of two defendants in the case. There was no statistically significant price reaction after this public disclosure despite it mentioning the verdict's record size and the Company's involvement (before and after a multiple comparisons adjustment). *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction after this announcement.[179]

196. The Texas verdict was again publicly discussed the following day, September 21, 2001, in a report issued by Mealey's, a commonly-used source of litigation and asbestos news.[180] Again, there was no statistically significant price reaction after the news of the verdict was released in the Mealey's report titled "Texas Jury Awards 5 Plaintiffs $130 Million Against NARCO, Dresser Industries For Exposure" (before or after the adjustment for multiple

[178] Complaint, ¶38.

[179] Nettesheim Report, Exhibit 17.

[180] Mealey's is a trusted source and premier provider of litigation and asbestos news.

comparisons). *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction after this announcement.[181]

197. After a later verdict was announced in December 2001, an analyst noted that there had been no decline in Halliburton's stock price after the earlier Texas verdict:

> **Note that Hal's share didn't fall when the news on these cases [Texas and Mississippi verdicts] came out** […]
>
> **Looking at Halliburton's share price performance over the past year it is interesting to note that it didn't move – up or down – when the first high profile case was announced in September** (we didn't find the SEC filing for that case) or when the company made the filing for the second case, on the 30th of October. [Credit Suisse, 12/10/2001, report on Cooper industries, emphasis added]

198. There also was no statistically significant price reaction following the Company's December 4, 2001 disclosure that the court had issued a judgment on the Texas verdict (before or after the adjustment for multiple comparisons). *See* Exhibit 1.

199. The total amount of $130 million in the Texas verdict was a record amount at the time it was rendered in September 2001.[182] Halliburton had not previously had a verdict in which its share was near $65 million, and this amount is larger than any of the three large verdicts that the Fund claims are alleged corrective disclosures.[183]

200. Despite being a record verdict, there was no statistically significant price reaction when the verdict was publicly announced for the first time, or when Halliburton announced the judgment months after the verdict had been publicly announced, indicating that the allegedly corrective information in the large verdict had no price impact.

201. If the Texas verdict itself was "stunning confirmation" that the Company had misled the market about its asbestos liability, as the Fund claims, then the fact that there is no price reaction to the public disclosure of the verdict is evidence that the alleged misrepresentations had no price impact. In truth, however, contrary to the Fund's claim, the

[181] Nettesheim Report, Exhibit 17.

[182] "Orange jury sets record for damages in asbestos lawsuit," *The Beaumont Enterprise*, September 20, 2001.

[183] Based on a review of asbestos verdicts against Halliburton disclosed in Halliburton's SEC filings and announced in Mealey's Litigation Reports.

adverse Texas verdict was not corrective of any alleged misrepresentation. As discussed above, the Company had disclosed and the market understood that there was a risk of such adverse verdicts.

d. The October 30, 2001 alleged corrective disclosure—when the Company announced the $150 million Mississippi verdict— was announced earlier to no price reaction and was not corrective of any prior alleged misrepresentation

202. On October 30, 2001, Halliburton announced that on October 26, 2001 a jury in Mississippi found Dresser liable for combined compensatory damages of $21.25 million for two of six plaintiffs that had asbestosis claims. The total verdict for the six plaintiffs against all defendants was for $150 million, "one of the largest compensatory verdicts in the history of asbestos litigation."[184] The verdict was against three defendants: Dresser Industries, AC&S Inc. and 3M Corp. The Complaint does not make any allegation about the Mississippi lawsuit, or Halliburton's October 30, 2001 disclosure.

i. The Mississippi verdict was announced two days earlier to no price reaction

203. The first publicly available news I could find about the Mississippi verdict was released on Sunday, October 28, 2001, two days before Halliburton's announcement. The news article was published in the Clarion-Ledger, a Mississippi state-wide newspaper, and noted that Dresser Industries was a codefendant in the verdict:

> A Holmes County Circuit Court jury awarded $150 million in compensatory damages to six laborers from Attala and Holmes counties who were exposed to asbestos as far back as the 1950s, their attorney said Saturday. Before the three-week trial began, Jackson attorney Issac Byrd said his clients settled with two of the 15 manufacturers named in the lawsuit. AC&S and Dresser Industries in Pennsylvania and 3m Corp. in Minnesota chose a jury trial.[185]

204. The following day, Dresser's codefendant in the case, 3M Corp., made a public announcement about the verdict and mentioned Dresser as a codefendant:

> 3M Corp. said Monday [October 29] that it will appeal a jury's award of compensatory damages to six Mississippi laborers who were exposed to asbestos

[184] "Asbestos case leads to $150 M jury award," *The Clarion Ledger*, October 28, 2001.

[185] "Asbestos case leads to $150 M jury award," *The Clarion-Ledger*, October 28, 2001.

> as far back as the 1950s. A jury in Lexington, Miss., on Friday **awarded $150 million to the laborers in the lawsuit involving 3M and two Pennsylvania companies, AC&S and Dresser Industries.** 3M's share of the verdict was $22.5 million.[186]

205. Halliburton's stock did not have a statistically significant price reaction on Monday, October 29, 2001, following the October 28 and October 29 news releases (before or after the adjustment for multiple comparisons). *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction after this announcement.[187]

206. As already noted, after a later verdict was announced in December 2001, an analyst noted that there had been no decline in Halliburton's stock price after the earlier Mississippi verdict:

> **Note that Hal's share didn't fall when the news on these cases [Texas and Mississippi verdicts] came out** […]
>
> **Looking at Halliburton's share price performance over the past year it is interesting to note that it didn't move – up or down –** when the first high profile case was announced in September (we didn't find the SEC filing for that case) **or when the company made the filing for the second case, on the 30th of October**. [Credit Suisse, 12/10/2001, report on Cooper industries, emphasis added]

207. The October 28, 2001 news article on the Mississippi verdict reported the asbestos plaintiffs' lawyers claim that this was "the largest compensatory damage award for asbestos exposure in the nation."[188] A report by the RAND Corporation, a non-profit think tank, also noted that the October 26, 2001 verdict was for "far more than any asbestosis award ever before delivered."[189] Making the verdict arguably more surprising was that it was for "unimpaired" asbestosis claims rather than claims for a deadly disease such as mesothelioma.[190]

208. Despite the verdict's unprecedented size, especially given that it was for "unimpaired" claims, only two Halliburton analysts issued reports following the alleged

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186 "3M to appeal asbestos case ruling," *Associated Press*, October 28, 2001 (emphasis added).

187 Nettesheim Report, Exhibit 17.

188 "Asbestos case leads to $150 M jury award," *The Clarion-Ledger*, October 28, 2001.

189 Stephen J. Carroll et al., *Asbestos Litigation*, (RAND: Santa Monica, CA, 2005).

190 Morgan Stanley, January 29, 2002 ("Another interesting point of reference is that each of the (unimpaired) plaintiffs in the Mississippi trial were awarded $25 million (payment of which is allocated between Halliburton and several other defendants, Halliburton's share is about $21 million).").

corrective disclosure. These analysts noted that the *verdict itself* did not change the asbestos liability for the Company but that the size of the verdict was surprising and the asbestos litigation environment was unpredictable and irrational.

> This jury award sets new precedents; the size of award is enormous and jury finding was based on shortness of breath and spots on the lung, not actual presence of asbestosis, a form of asbestos-related lung cancer. [A.G. Edwards, 10/31/2001]

> The disclosure itself is a change of procedure for Halliburton but **does not appear to signal a meaningful change in the pattern of asbestos litigation for the company…** We continue to monitor the situation closely and **we recognize the unpredictability and apparent irrationality of the asbestos litigation environment** in general. [Salomon Smith Barney, 10/31/2001, emphasis added]

209. Thus, the October 30, 2001 alleged corrective disclosure—when the Company announced the $150 million Mississippi verdict—was not corrective of any prior alleged misrepresentation regarding the Company's reported asbestos liability and was announced earlier to no price reaction.

ii. There was no statistically significant price reaction following the October 30, 2001 announcement, after adjusting for multiple comparisons

210. My findings show that there was no statistically significant price decrease following the October 30, 2001 announcement. When tested in isolation, the price reaction following the October 30, 2001 announcement was statistically significant. However, this result should not be surprising given the 35 dates on which the Fund has alleged a misrepresentation and/or a corrective disclosure and the 35 tests of statistical significance performed. After the appropriate adjustment for 35 multiple comparisons, the price reaction after this announcement was not statistically significant. *See* Exhibit 1 for details. Additionally, after the appropriate adjustment for 35 multiple comparisons, there was no statistically significant price reaction on November 1, 2001, which Ms. Nettesheim considers to be a continuation of the price reaction after the October 30, 2001 announcement**.** *See* Exhibit 1. This lack of statistical significance does not support price impact of the alleged asbestos misrepresentations.

e. The December 4, 2001 alleged corrective disclosure—when the Company announced the judgment of the Texas verdict—was not corrective of any alleged misrepresentation

211. On December 4, 2001, the Company announced in an 8-K filing that on November 29, 2001 a Texas district court had entered a judgment against Dresser for its $65 million share of the Texas jury verdict rendered on September 12, 2001. This is the same Texas verdict discussed above. In the same filing, the Company disclosed that the same district court also entered three additional judgments against Dresser in favor of 100 other asbestos plaintiffs in the aggregate amount of $35.7 million related to an alleged breach of a purported settlement agreement signed earlier in the year by Harbison-Walker.

212. As discussed below, after examination of this alleged corrective disclosure, I find that there was no price impact from this announcement.

i. There was no statistically significant price reaction after the announcement of the Texas judgments on December 4, 2001 or December 5, 2001

213. There was no statistically significant price reaction after the Company's announcement of the Texas judgments on December 4, 2001 (before or after the adjustment for multiple comparisons). In addition, there was no statistically significant price reaction (before or after the adjustment for multiple comparisons) on December 5, 2001, which Ms. Nettesheim considers to be a continuation of the price reaction after the December 4, 2001 announcement**.**

ii. The Texas verdict was announced more than two months earlier to no statistically significant price reaction

214. The Fund's allegations imply that the Texas verdict was first made public after the December 4, 2001 announcement of the judgment. However, as discussed above, the Texas verdict had been rendered on September 12, 2001, more than two months before the December 4, 2001 announcement and publicly disclosed in several news articles, trade publications, and analyst reports.

215. As discussed above, the first public announcements of the verdict that I could find were on September 20, 2001 and September 21, 2001. *The Beaumont Enterprise* printed and posted to its website an article discussing the verdict on September 20, 2001, and Mealey's released a report on the verdict on September 21, 2001. There were no statistically significant

price reactions to Halliburton's stock on either date (before or after the adjustment for multiple comparisons). *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction on either of these dates.[191]

216. The Texas verdict was also discussed in several analyst reports on Halliburton before the December 4, 2001 alleged corrective disclosure, including the following:

> Although some investors are concerned over the implications of a recent large jury award to an asbestos claimant, the facts of the case remain unclear and HAL believes that the ruling is highly likely to be overturned on appeal. [Deutsche Bank, 10/5/2001]
>
> [D]uring the quarter the company was subject to an adverse jury verdict in Orange County, Texas. [Salomon Smith Barney, 10/23/2001]
>
> In the last month or so, the company lost a case in Texas, in which five Plaintiff were awarded $65 million by a jury. [UBS, 10/24/2001]
>
> However, during the quarter the company was subject to an adverse jury verdict in Orange County, Texas. The jury found in favor of five Plaintiff and awarded $15 million in compensatory damages and $50 million in punitive damages. [Salomon Smith Barney, 11/9/2001]

217. An analysts also commented, after the December 4, 2001 announcement, that this verdict "had been widely known" for weeks, and thus was not "incremental news":

> We do not believe this is incremental news, as the verdict had been rendered several weeks ago and the information on the case had been widely known. [SunTrust Robinson Humphrey, 12/5/2001]

iii. The disclosure on December 4, 2001 of judgments related to an alleged breach of contract was not corrective of any alleged misrepresentation

218. In the same 8-K filing that disclosed the Texas verdict on December 4, 2001, the Company also announced that a Texas district court entered three judgments against Dresser in favor of 100 asbestos plaintiffs in the aggregate amount of $35.7 million related to an alleged breach of a purported settlement agreement signed earlier in the year by a lawyer hired by Harbison-Walker. These three judgments are not corrective of any alleged misrepresentation.

[191] Nettesheim Report, Exhibit 17.

Halliburton made no prior representations about these cases in which the Texas court entered the judgments. And as I discuss above, the Company had disclosed and the market was aware of the possibility of adverse rulings regarding asbestos litigation.

219. Market commentary concerning these judgments indicates the market did not find them corrective of any prior misrepresentation. One analyst noted that "[v]igorous appeals [were] expected" and reminded investors that "HAL has been able to settle similar claims at much lower costs."[192] Another analyst discussing the judgment on the verdict also announced that day (which it concluded was "not . . . incremental news" because "the information on the case had been widely known" for weeks), but included no mention whatsoever of the separate judgments on the breach of settlement agreement claims.[193]

220. Moreover, there was no price reaction after this announcement (before or after the adjustment for multiple comparisons). Thus, this alleged corrective disclosure offers no support for price impact of the alleged asbestos misrepresentation.

f. The December 7, 2001 alleged corrective disclosure—when the Company announced the Maryland verdict—was not corrective of any alleged misrepresentation

221. On December 7, 2001, Halliburton announced a December 5, 2001 jury verdict in Baltimore, Maryland of which Dresser's share was $30 million.[194] The verdict awarded five plaintiffs $40 million and was against three defendants: Dresser Industries, AC&S Inc. and A.P. Green Industries.[195]

222. Halliburton's stock price had a statistically significant price decline on December 7, 2001. The stock rebounded a statistically significant amount on the following trading date, December 10, 2001. According to the event study, after controlling for market and industry conditions, on December 10, 2001 Halliburton's stock rebounded 17% or approximately $900 million in market value. *See* Exhibit 1.

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[192] A.G. Edwards, December 5, 2001.

[193] SunTrust, December 5, 2001.

[194] *See* Halliburton Press Release, December 7, 2001.

[195] *See* "Asbestos Verdict is $40 Million," *The Baltimore Sun*, December 7, 2001.

223. Halliburton's December 7, 2001 announcement did disclose the two-day-old Maryland verdict but did not include any new information regarding any of the alleged misrepresentations concerning the Company's asbestos liability.

224. The Fund's theory that the December 7 disclosure caused investors to "realize[] that the Company had been affirmatively misleading them . . . regarding the Company's asbestos exposure"[196] is contradicted by the market's reaction to the disclosure of the previous, larger verdicts and judgment. As discussed above, there was no statistically significant price reaction to the Texas and Mississippi verdicts. By many measures, these prior verdicts were larger than the Maryland verdict. The prior verdicts were larger in terms of total amount, Halliburton's share of the verdict and average verdict per plaintiff:

- The total verdict in Maryland was $40 million, while the total verdict in Texas was more than three-times as large at $130 million and the total verdict in Mississippi was almost four-times as large at $150 million;
- The verdict amount per plaintiff in Maryland was $8 million, while the verdict amount per plaintiff in Texas was more than three-times as large at $26 million and the verdict amount per plaintiff in Mississippi was more than three-times as large at $25 million; and
- Halliburton's share of the verdict in Maryland was $30 million while the Company's share of the verdict in Texas was more than twice as large at $65 million.

225. Moreover, the Maryland verdict was for plaintiffs with mesothelioma, the type of claim that would be expected to have higher dollar awards as it is considered a fatal disease caused only by asbestos, and thus would not be expected to have a bigger price reaction than the earlier verdicts. Mesothelioma claims were considered the most meritorious of all asbestos claims and have historically received higher settlement and jury awards than other asbestos claims. Analyst and trade publication reports discussed this issue:

> The most serious of asbestos-related diseases, mesothelioma (meso) is a cancer of the membranes that cover and protect the lungs. Meso is the hallmark asbestos disease; asbestos is the only known cause and the disease has an extremely long latency period (30–40 years, in some cases). Meso is generally fatal within 18 months of diagnosis. Fortunately, it is also rather rare, even among individuals

[196] Complaint, ¶ 191.

> with a long history of asbestos exposure. **Meso claims are considered the most meritorious of all asbestos claims**, due to both the severity of the illness and the fact that asbestos is the only known cause. **Meso patients generally receive the highest settlements and jury awards on their claims**. [Morgan Stanley, 1/29/2002, emphasis added]
>
> As a result of the differences in average jury awards by injury type, although Plaintiff with noncancerous diseases accounted for the largest number of plaintiff verdicts, **mesothelioma Plaintiff obtained the largest proportion of dollars awarded**. As Figure 3.11 illustrates, **60 percent of all dollars awarded by juries went to mesothelioma Plaintiff, who accounted for only 30 percent of all plaintiff verdicts.** In contrast, Plaintiff with diseases other than cancer or asbestosis, who accounted for 20 percent of plaintiff verdicts, got 5 percent of the total dollars awarded. [RAND Report, 2005, emphasis added]

226. Plaintiff's allegation that the disclosure of the Maryland verdict was corrective of the alleged misrepresentations is also contradicted by analysts' reactions after December 7. Analysts continued to believe that Halliburton had been "managing the [asbestos] risk with appropriate reserves"[197] and that the verdicts would get overturned or adjusted, especially since the verdicts related to Harbison-Walker claims for which Halliburton did not become involved until late in the process and thus did not have the opportunity to fully defend.[198] Moreover, analysts believed that the verdicts would be largely covered by insurance.

> HAL has ample liquidity and insurance coverage to deal with any asbestos claims:… Harbison Walker (the former Dresser sub) has $2 billion of insurance coverage and HAL has Equitas backing it, which has over $10 billion in assets. [Deutsche Bank, 12/10/2001]
>
> We are not concerned about the effects of these liabilities on Halliburton's financial health at this time. [RBC, 12/10/2001]
>
> The three multi-million dollar jury verdicts of the past two months relate to Harbison-Walker cases filed since 1992…However, Halliburton has approximately $2 billion of insurance recoverables related to H-W cases, and intends to vigorously appeal the three aforementioned cases. [Salomon Smith Barney 12/11/2001]

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[197] SunTrust, December 10, 2001.

[198] *See*, for example, A.G. Edwards, December 10, 2001 ("In all of the cases, HAL's grounds for appeal could results [*sic*] in favorable outcomes in the courts of appeal […] Importantly, all of the recent juror awards have come in H-W cases where HAL did not become involved until late in the process and its typical defense strategy was not fully utilized."); RBC, December 10, 2001 ("Management is very confident and certainly makes a convincing case that all of the recent verdicts will be significantly reduced or overturned on appeal. Following the appeals process, Halliburton has never paid more than $1.8 million to settle a claim.").

Importantly, all of the recent juror awards have come in H-W cases where **HAL did not become involved until late in the process and its typical defense strategy was not fully utilized**. [A.G. Edwards, 12/10/2001, emphasis added]

While the recent verdicts clearly stand out from the company's past settlement practice, **it is fair to say that the new verdicts were delivered against Harbison-Walker's legal team, not Halliburton's.** [SWS Securities, 12/10/2001, emphasis added]

Although **we think the Maryland, Texas and Mississippi cases will be overturned or adjusted in Halliburton's favor**, the jury verdicts in these totaled $116 million for 16 plaintiffs. [CIBC, 12/11/2001, emphasis added]

Halliburton believes, with justification (in our view), that its ultimate payouts in the three verdicts rendered last week will be a fraction of the $131 million in total assessed damages. [Bear Stearns, 12/11/2001, emphasis added]

It is important to note that Halliburton was brought into these H-W cases in June 2001, well after they were underway. This **prevented Halliburton from employing their typical defense strategy, which has proven to be effective to date**. Halliburton was not able to get witnesses listed for trial, nor were they able to use documents they would have liked because of the status of the cases when Halliburton came on board. [CIBC, 12/11/2001, emphasis added]

[T]he **four judgments are almost immaterial on their own, as each would be reimbursable at a 95% rate under insurance, if they were affirmed.** [Morgan Stanley, 1/29/2002, emphasis added]

227. Analysts did not believe that the verdicts revealed any flaw in or misrepresentation of Halliburton's asbestos strategy or reserves for pending claims:

HAL's **aggressive defense strategy intact.** [A.G. Edwards, 12/10/2001, emphasis added]

Halliburton employs an **effective and aggressive legal strategy** to defend its asbestos claims. [Jefferies, 12/10/2001, emphasis added]

While the recent verdicts clearly stand out from the company's past settlement practice, it is **fair to say that the new verdicts were delivered against Harbison-Walker's legal team, not Halliburton's**. [SWS Securities, 12/10/2001, emphasis added]

We believe there are no indications that the suits filed against the company are spiraling out of control and we believe **HAL management has been very forthright** with the pending litigation procedures while aggressively **managing**

> **the risk with appropriate reserves** and the appeals process. [SunTrust Robinson Humphrey, 12/10/2001, emphasis added]

228. In summary, the price reaction after the announcement of the Maryland verdict is not evidence of price impact of the alleged misrepresentations regarding asbestos. First, the announcement contained no information corrective of the alleged misrepresentations. Second, the lack of price impact following the disclosure of the earlier verdicts and judgments refutes the notion that a large verdict itself offered "stunning confirmation" that Halliburton's prior statements regarding its asbestos liability were false. And third, analyst commentary following the December 7 announcement shows that the market did not view it as indicating that Halliburton had misled the market about its asbestos liability.

6. Halliburton's stock decline at the end of the class period was attributed to an increase in uncertainty and the change in the economic and asbestos environment that also affected other companies

229. On the last day of the class period, no new information was disclosed regarding the alleged misrepresentations, other than an adverse verdict, which is not corrective. Halliburton's price decline at the end of the class period was attributed to an increase in uncertainty and the change in the economic and asbestos environment at the end of the class period, rather than to an alleged corrective disclosure of prior alleged misrepresentations about the Company's asbestos liability. The fact that other companies with asbestos exposure were similarly affected demonstrates that Halliburton's price decline at the end of the class period was not due to the revelation of alleged fraud but to the change in the economic and asbestos environment.

a. There was increased uncertainty and volatility at the end of the class period

230. According to analysts and options pricing data, Halliburton's price decline after the December 7, 2001 announcement was due to an increase in uncertainty and irrationality. In addition, Enron's recent bankruptcy reportedly further increased uncertainty, which affected the price of Halliburton's stock at the end of the class period.

231. Investors are generally risk-averse and to the extent that risk or uncertainty increase, values will fall. It is a basic financial principle that "[a] safe dollar is worth more than a risky one."[199] As explained by a textbook on investment analysis:

> "Most investors require higher rates of return on investments if they perceive there is any uncertainty about the expected rate of return. This increase in the required rate of return over the NRFR [nominal risk-free rate of return] is the risk premium."[200]

232. The evidence is contrary to the Fund's claim of price impact of the alleged misrepresentations. Rather than commenting at the end of the class period that they had been misled, analysts covering Halliburton focused on the increasing uncertainty and irrationality:

> However, **the current climate is sufficiently uncertain to merit more caution** on our part. [UBS Warburg, 12/7/2001, emphasis added]
>
> We continue to monitor the situation closely and **we recognize the unpredictability and apparent irrationality of the asbestos litigation environment in general**. [Salomon Smith Barney, 12/7/2001, emphasis added]
>
> Downgrading Halliburton's short and long-term rating, **due to increasing uncertainty surrounding asbestos litigation.** [Hibernia, 12/7/2001, emphasis added]
>
> Our **cautious view on HAL was based upon ongoing asbestos-rated [*sic*] legal uncertainty** and our view of some near-term earnings risk. [Jefferies, 12/10/2001, emphasis added]
>
> In our opinion, the recent sell-off in the shares is excessive based on the known facts. However, **it is the "unknown" when it comes to asbestos liabilities that causes us concern. [**RBC Capital Markets, 12/10/2001, emphasis added]
>
> **Results of asbestos litigation have proven to be unpredictable and often irrational.** The number of claims submitted to Halliburton doubled in 2Q01 sequentially, then dropped in the following quarter. Overall, claims have risen in recent years and show no signs of subsiding. **Also, while the settlement process tends to produce reasonable and predictable results, venue shopping and unpredictable juries increase the likelihood of occasional large judgments, as recently seen.** Future cost per claim could be materially higher compared to the historical cost of $200 per claim (net to HAL). [Jefferies, 12/10/2001, emphasis added]

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199 Richard A. Brealey, Stewart C. Myers & Franklin Allen, *Principles of Corporate Finance* (McGraw-Hill: New York, 11th ed., 2014), 22.

200 Frank K. Reilly & Keith C. Brown, *Investment Analysis and Portfolio Management* (Thomson: Boston, 6th ed., 2000), 19.

> We believe near-term, potentially negative, asbestos-related events include: 1) Additional **large jury verdicts that, by their nature, are unpredictable as to timing and amount.** [RBC, 12/10/2001, emphasis added]
>
> It is also difficult to predict the sometimes irrational civil court system. [CIBC, 12/11/2001]
>
> Asbestos, in our opinion, is not the fault of [Crown Cork & Seal]. Rather, it can be attributed, in our opinion, to a U.S. legal system that has run amok when it comes to asbestos litigation. [Bear Stearns, 12/13/2001, report on Crown Cork & Seal]
>
> If the claims are manageable, why are investors still selling the stock at depressed levels? Beyond the fear that the claims and lawsuits could escalate substantially, **many investors appear to be selling just to avoid the lingering uncertainty.** Some investors hold the view that even if the oil service group rebounds this year in an economic recovery with higher energy prices and drilling activity, **Halliburton stock price could lag behind, dogged by continuing uncertainty about asbestos.** [SunTrust Robinson Humphrey, 1/28/2002, emphasis added]

233. Analysts lowered their expectations of Halliburton's stock price because of increased uncertainty. For example, on December 7, 2001, the analyst from Salomon Smith Barney lowered his price target for Halliburton from $36 to $20, a 44% decrease. According to the analyst, the reduction in the price target was due to uncertainty. The report stated: "We are further dropping our price target to $20 from $36 […] due to the uncertainty surrounding the asbestos liabilities."[201] The analyst made no mention of being misled by the Company about its asbestos liability, and, in fact, three days later stated, "[M]anagement has been very, very forthcoming and proactive in getting disclosure out to investors on the asbestos situation."[202] This demonstrates that Halliburton's stock price decline at the end of the class period is not evidence of price impact due to the alleged fraud but rather a product of increasing uncertainty and changing market conditions.

234. The expected volatility of Halliburton's stock price dramatically increased at the end of the class period. In particular, there was a huge increase in Halliburton's implied volatility, a measure of expected stock price volatility, after the December 7, 2001 announcement.

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[201] Salomon Smith Barney, December 7, 2001.

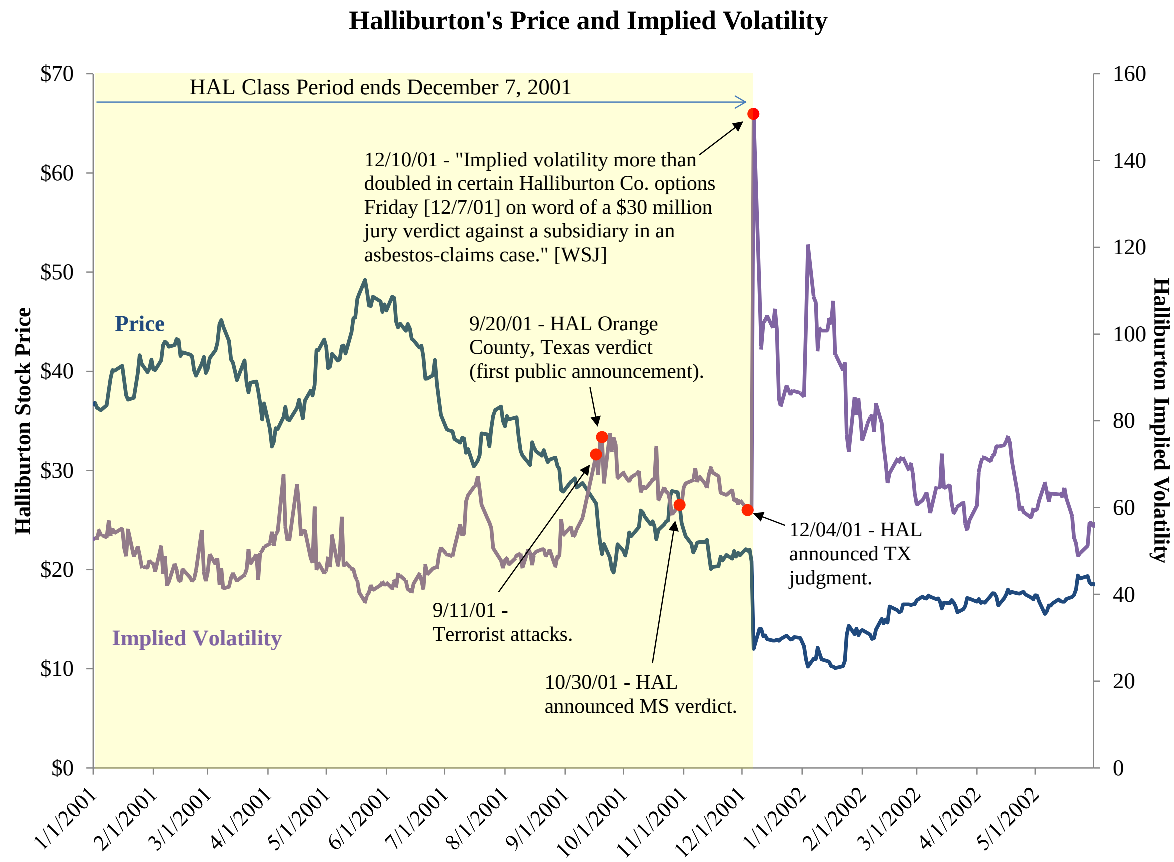
[202] Salomon Smith Barney analyst on CNN, December 10, 2001. This was part of a CNN interview of Geoff Kieburtz, an analyst with Salomon Smith Barney.

235. Implied volatility is a measure of the market's expectation of the future variability in the stock price. It is derived from the price of options traded on that stock.[203] By examining option prices, one can back out the market's expectations of future volatility. In simple terms, options are contracts to buy or sell a stock in the future at a predetermined price. The value of options is in large part determined by the expected volatility of the stock price. In general, higher volatility means higher option prices because the higher the volatility, the greater the likelihood the option will be "in-the-money." An increase in implied volatility indicates that the market expects the stock price to become more variable in the near future. The higher the implied volatility of a stock, the greater variability the market expects to see in that stock's price.

236. The chart below shows Halliburton's stock price and implied volatility during the class period. Importantly, there is a large spike in implied volatility right after the end of the class period, but there is no similar increase after any announcement of the Texas or Mississippi verdicts and judgments, indicating that the increase in volatility was not driven by the announcement of a large verdict (which the Fund claims is corrective) but by a change in the market's expectations about future uncertainty. In other words, the market was reacting to an increased perceived variability in the future stock price, not the realization that the Company "had been affirmatively misleading them" in prior disclosures regarding the Company's asbestos liability.[204] This demonstrates that Halliburton's stock price decline at the end of the class period is not evidence of price impact due to the alleged fraud but rather a product of increasing uncertainty.

[203] *See*, for example, Aswath Damodaran, *Investment Valuation*, (John Wiley & Sons, Inc.: New York, 2nd ed., 2002), 99.

[204] Complaint, ¶ 191.



Notes and Sources:
Implied volatility data from Bloomberg, L.P.

237. The bankruptcy of Enron in December 2001 also contributed to the increasing uncertainty in the market at the end of the class period. Analysts believed that the drop in Halliburton's stock price at the end of the class period was in part caused by the increasing uncertainty in the market created by the Enron bankruptcy:

> A series of asbestos related verdicts against Halliburton, the large oil field service business based in Dallas, has caused a major decline in the value of its stocks. **Analysts say that investors are also responding to the recent collapse of Enron** in their fears that Halliburton could face a steadily mounting volume of asbestos liabilities. [Insurance Information Institute, 12/8/2001, emphasis added]

> **Call it the Enron aftershock**. **Investors frightened by Enron's rapid demise** jettisoned shares of the Halliburton Company yesterday after the latest in a string of asbestos-related verdicts against the company stoked fears of mounting liabilities, analysts said... **"It has to do with Enron**," said Wesley Maat, a stock analyst who follows oil field services companies at Dresdner Kleinwort

> Wasserstein. "After what happened there, investors seem to feel that anything is possible." [*New York Times*, 12/8/2001, emphasis added]
>
> Although we understand the inclination to sell Halliburton based on the increased uncertainty of the asbestos litigation, **we believe that a portion of the stock price decline was due to the enormous losses as a result of the recent Enron bankruptcy filing**. Understandably, investors are extremely skittish and more inclined to exit first and ask questions later. Although we recognize that this developing situation is likely to cap the upside potential of Halliburton's stock price, we continue to believe that the market has overreacted and the current valuation of HAL is attractive. [A.G. Edwards, 12/10/2001, emphasis added]
>
> Some investors hold the view that even if the oil service group rebounds this year in an economic recovery with higher energy prices and drilling activity, Halliburton stock price could lag behind, dogged by continuing uncertainty about asbestos. **We believe this fear has been exacerbated by the fallout from the Enron debacle.** It appears that institutions that lost millions in Enron are less willing to risk the potential loss in other stocks with widely known problems, such as asbestos. [SunTrust Robinson Humphrey, 1/28/2002, emphasis added]

b. Analysis of other companies with asbestos exposure demonstrates that Halliburton's price decline at the end of the class period was due to changing conditions and not the alleged fraud

238. The increased uncertainty and changing market conditions at the end of the class period were not specific to Halliburton but also affected other companies with asbestos exposure. The fact that other companies were affected demonstrates that Halliburton's price decline at the end of the class period was due to changing conditions and not the alleged fraud.

i. The stock of other companies with asbestos exposure declined after the December 7, 2001 alleged corrective disclosure on fears of asbestos and uncertainty—evidence that changing conditions, rather than the alleged fraud, was the cause of Halliburton's stock price decline

239. The stock price of other companies with asbestos exposure also declined after the December 7, 2001 alleged corrective disclosure reportedly on uncertainty and fears about asbestos. The stock decline of these companies is evidence that Halliburton's price reaction at the end of the class period is not related to the alleged misrepresentations since Halliburton did not make any statements about the asbestos liabilities of these other companies.

240. News stories and analyst reports after December 7, 2001 discussed the stock price "plunge" of several companies in a variety of different industries due to widespread fears regarding asbestos. Companies including CBS Viacom, Sealed Air, Pfizer, Goodrich, Cooper Industries, ABB, Georgia-Pacific, Crown Cork & Seal had price declines at the end of the class period.[205] For example, according to Dow Jones, ABB "fell around 9% Monday on fears of rising asbestos claims in the U.S. following a court verdict against Halliburton Co. (HAL) in an asbestos-related lawsuit."[206] Similarly, according to Reuters, "Growing fears that asbestos liabilities could be worse than expected have hammered shares within a disparate range of industries in the past week, including media giant Viacom Inc. and oil services group Halliburton Co."[207]

241. The stock price declines of some of the other asbestos defendants after the December 7, 2001 alleged corrective disclosure were even larger than Halliburton's decline in terms of market capitalization (total value of the stock). For example, CBS-Viacom stock declined almost $12 billion–versus Halliburton's decline of $3 billion–in the two days after the December 7, 2001 alleged corrective disclosure. Market commentators discussed the decline in CBS-Viacom's market capitalization together with Halliburton's stock price decline, and attributed it to the fears and uncertainty regarding asbestos:

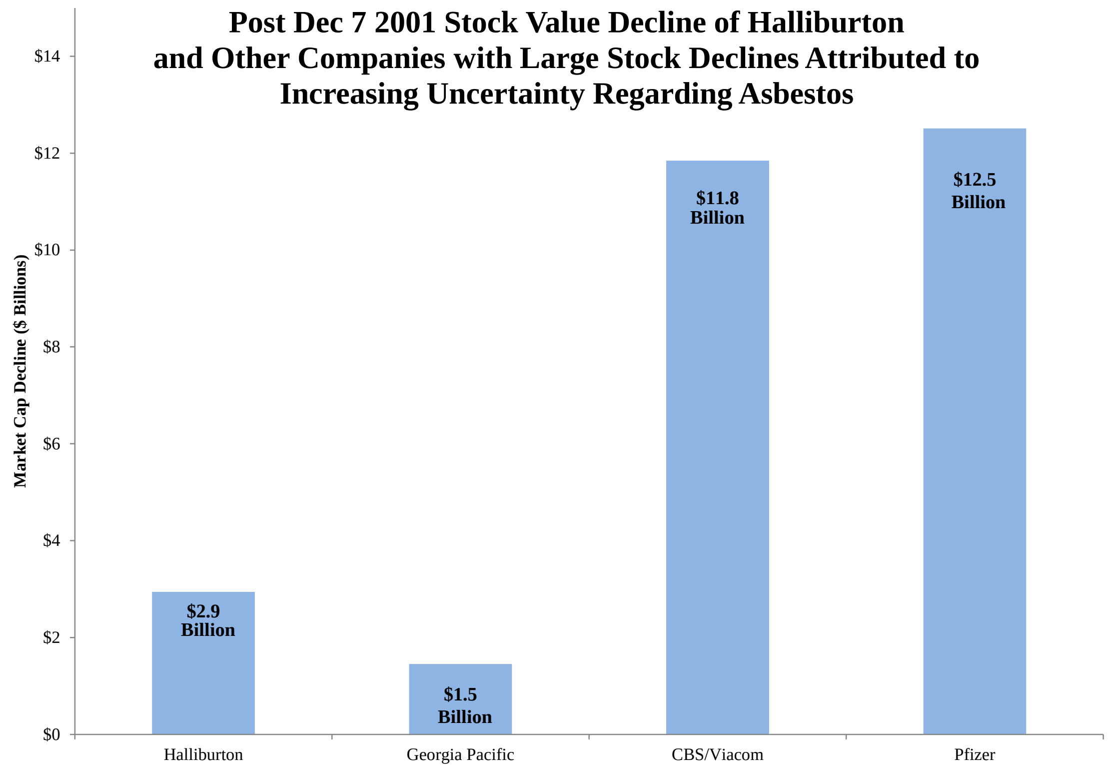
> Shares of a wide range of U.S. companies, from media giant Viacom Inc. to Bubble Wrap maker Sealed Air Corp., plunged on Monday amid widespread fears that their asbestos liability exposures could be larger than anticipated. [*Reuters*, 12/10/2001]
>
> Viacom stock was down on Friday largely due to fears of asbestos liability. [Deutsche Bank, 12/7/2001, report on Viacom]
>
> Viacom's potential asbestos liability, inherited from the CBS purchase, came back to the forefront on Friday as Halliburton lost an asbestos related lawsuit highlighting the potential cost of these claims. [Salomon Smith Barney, 12/10/2001, report on Viacom]

[205] *See*, for example, "Anxious investors sell stock in asbestos defendants," *Reuters*, December 10, 2001; "Asbestos Exposure: How Well Are Companies Insulated?" *Barron's*, December 22, 2001; Analyst report on B.F. Goodrich, Buckingham Research Group, December 7, 2001; "Asbestos Claims," *Dow Jones Newswires*, December 10, 2001.

[206] "Asbestos Claims," *Dow Jones Newswires*, December 10, 2001.

[207] "Asbestos worries snare wider range of U.S. firms," *Reuters*, December 13, 2001.

242. The chart below shows the stock value decline of Halliburton and several other companies with asbestos liabilities on the two days after the December 7, 2001 alleged corrective disclosure.



Notes and Source: Data from Bloomberg L.P.
Stock value decline on two trading days following December 7, 2001 alleged corrective disclosure. Stock value decline is unadjusted.

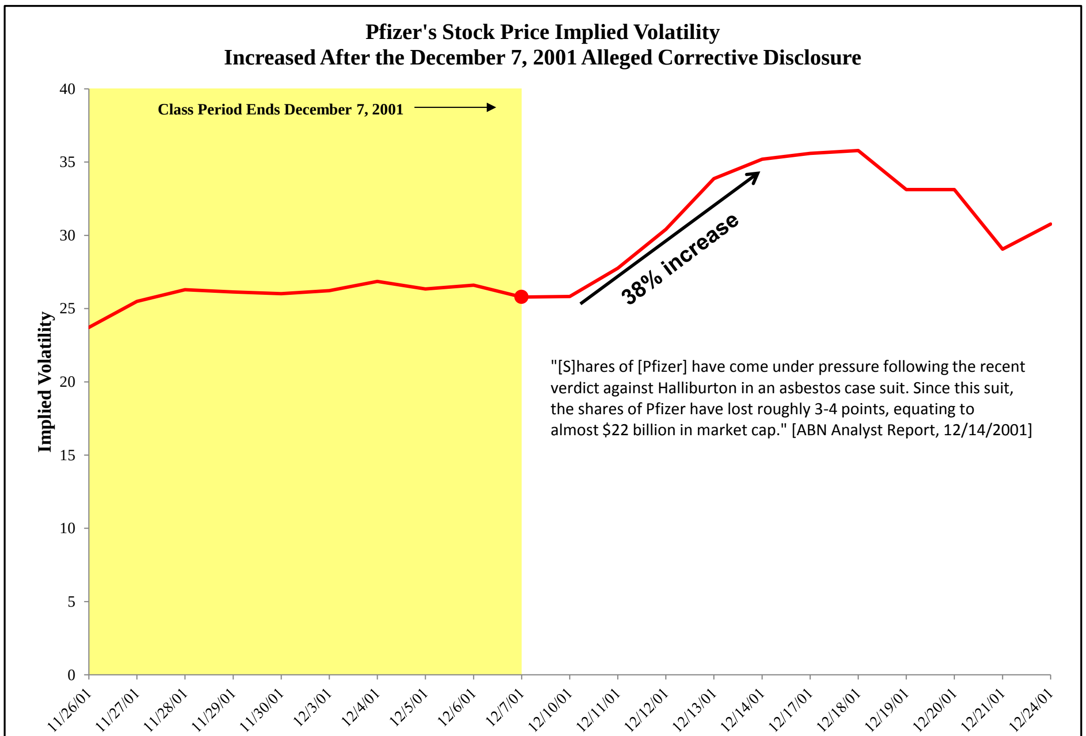
243. The fact that these other companies' stocks declined more in value than Halliburton's stock is direct evidence that the alleged misrepresentations regarding Halliburton's asbestos liability was not the cause of Halliburton's stock price decline at the end of the class period. Therefore, Halliburton's stock price decline at the end of the class period provides no basis for price impact of the alleged misrepresentations regarding asbestos.

ii. Similar to Halliburton, the implied volatility of other companies with asbestos exposure increased after the end of the class period—demonstrating increased uncertainty and changing conditions

244. Further evidence that Halliburton's stock price decline at the end of the class period was caused by increasing uncertainty regarding asbestos (rather than the alleged fraud) is

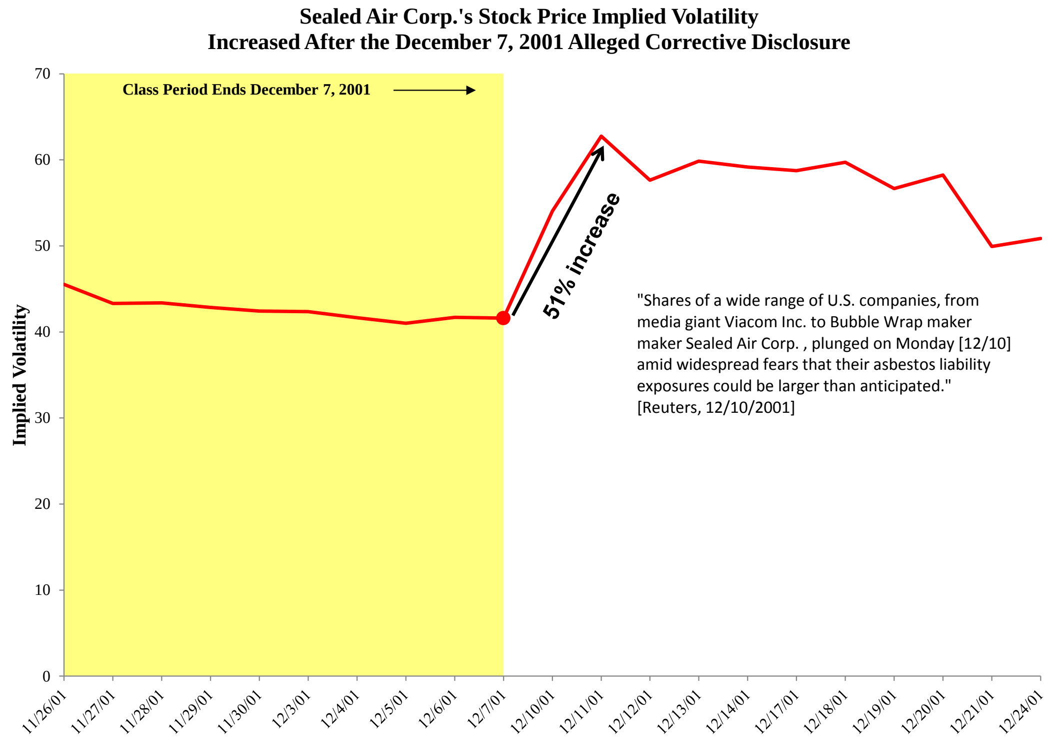
that the implied volatility of the stock of other companies with asbestos exposure increased dramatically following the December 7, 2001 alleged corrective disclosure. The increased implied volatility of other companies cannot be due to Halliburton's alleged fraud and thus, is further evidence of increased uncertainty in the market. Moreover, because Halliburton's price decline is due to this increased uncertainty, Halliburton's price decline is not evidence of price impact.

245. The charts below show the implied volatility of three other companies with asbestos exposure after the December 7, 2001 alleged corrective disclosure. These three companies were reported to have stock declines after the end of the class period due to asbestos fears and uncertainty.[208]

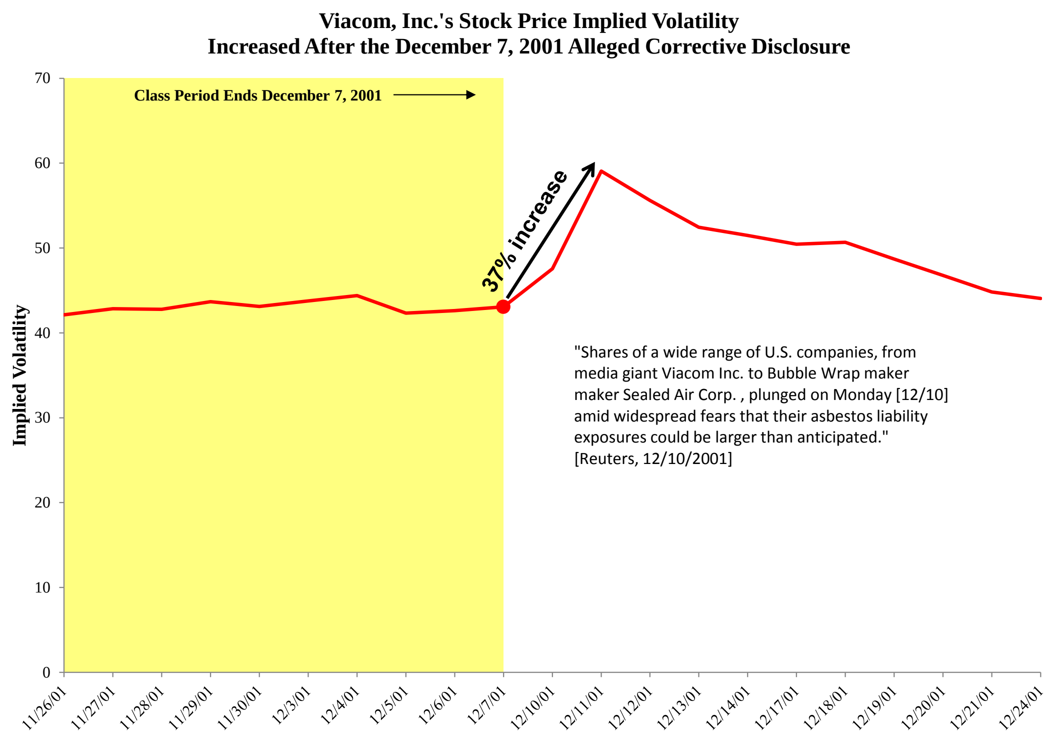


Source: Data from Bloomberg, L.P.

[208] *See*, for example, "Anxious investors sell stock in asbestos defendants," *Reuters*, December 10, 2001; "Asbestos Exposure: How Well Are Companies Insulated?" *Barron's*, December 22, 2001.



Source: Data from Bloomberg, L.P.



Source: Data from Bloomberg, L.P.

iii. Other companies with asbestos exposure had no statistically significant price reactions attributable to asbestos news during the class period, but had significant price reactions after the class period –demonstrating that price reactions to asbestos news at the end of the class period are not evidence of how the market would have reacted earlier

246. Companies other than Halliburton with asbestos exposure had no statistically significant price reactions attributable to asbestos news during the class period but had significant price reactions after the end of the class period. This demonstrates that the market viewed asbestos news for companies with asbestos exposure differently after the class period than it did at the time of the alleged misrepresentations. Thus, any price reaction to asbestos news at the end of the class period is not evidence of how the market reacted to related information earlier in the class period. Therefore, even if the verdict news announced at the end of the class period were corrective (which my analysis shows it was not), the price decline after this announcement is not evidence that the purportedly related alleged misrepresentations had any price impact on the stock price.

247. Honeywell and 3M were codefendants in Halliburton's Texas and Mississippi verdicts, respectively. As detailed below, Honeywell and 3M had large verdicts during the class period but no statistically significant price reactions attributable to these verdicts. In contrast, after the end of the class period, both Honeywell and 3M experienced statistically significant price reactions to asbestos news and verdicts.[209] Additionally, Dow Chemical was another company with large asbestos exposure, yet no analyst or news story commented on its asbestos exposure until after the end of the class period. According to market commentary, asbestos exposure only became an issue for Dow Chemical after the class period.

Honeywell

248. Honeywell, a codefendant in Halliburton's Texas case, had no statistically significant negative price reactions after several large verdicts in 2001, but had statistically significant negative price reactions after several smaller verdicts in 2002.

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[209] The examples in this section—Honeywell, 3M, and Dow Chemical—were tested for statistically significant price reactions by controlling for the S&P 500 index and using a regression period of 52 weeks prior to the announcement of each event.

249. Honeywell's asbestos liability stemmed from its relationship with Bendix, a former unit of Allied Signal that merged with Honeywell in 1999, and NARCO, a subsidiary Honeywell owned from 1979-1986.[210]

250. Despite Honeywell's asbestos liability, no news stories between January 1, 2001 and December 7, 2001, discussed Honeywell's asbestos liability,[211] and no analyst reports covering Honeywell in 2001 mentioned asbestos.[212] Moreover, Honeywell had two large verdicts against its subsidiaries in 2001, before the end of the class period. Honeywell had no statistically significant price reaction after the first verdict was publicly disclosed. The negative price reaction after the second verdict was disclosed was attributed not to the asbestos verdict but rather to the downturn in the commercial air transport market.

- **January 11, 2001 verdict:** Honeywell's subsidiary NARCO was a codefendant in a $17.5 million verdict awarded to five plaintiffs in New York. The verdict was rendered January 11, 2001 and discussed in a Mealey's report on January 19, 2001.[213] There was no statistically significant price reaction after this announcement.
- **September 12, 2001 verdict:** NARCO was a codefendant in the $130 million Texas verdict rendered September 12, 2001, with an equal share of the verdict. The first disclosure of the verdict I found was the *Beaumont Enterprise* article dated September 20, 2001. There was a statistically significant negative price reaction on this date, but no analyst report or news article, other than the *Beaumont* article itself, discussed Honeywell's asbestos liability or the asbestos verdict around this time including through the end of the year. Instead, news articles and analyst reports on September 20, 2001 and the surrounding days focused on Honeywell's plans to cut jobs and its earnings estimates, which were revised downward due to the downturn in

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210 "Thinking About Asbestos," Lehman Brothers, March 20, 2002.

211 The news search was done through Factiva, a provider of news and information sources. A search for the words "Honeywell" and "asbestos" in headlines and lead paragraphs of articles published in 2001 produced one news story. This news story provided "news highlights" from that day and the mention of asbestos referred to another company, not Honeywell.

212 The analyst report search was done through Thomson Reuters, a provider of company analyst reports from brokers. A search for the word "asbestos" in Honeywell analyst reports published in 2001 produced zero results.

213 15 Mealey's Litigation Report: Asbestos, No. 24 (January 19, 2001).

the commercial air transport market after the terrorist attacks on 9/11.[214] Honeywell's stock price did not have a statistically significant price reaction following the news of the Texas judgment on December 4, 2001.

251. In contrast to no news or analyst reports mentioning Honeywell and asbestos in 2001, I found over 200 news stories, along with over 50 analyst reports, that discussed Honeywell's asbestos liability in 2002, after the end of the class period.[215]

252. Additionally, Honeywell had negative statistically significant price reactions following news of an asbestos verdict and a settlement against its subsidiaries in 2002, even though the total size of the verdict was less than half the Texas verdict announced in 2001:

- **February 8, 2002 verdict:** Honeywell's subsidiary Bendix was the defendant in a $53 million verdict that was announced on February 8, 2002.[216] In spite of this understatement, Honeywell's stock had a statistically significant drop on February 8, 2002 and a larger intraday price decline.[217]
- **On April 18, 2002**, Honeywell clarified that it was responsible for at least $11 million of the $53 million verdict.[218] Honeywell's stock had a statistically significant drop after this announcement.
- **September 13, 2002 settlement:** Honeywell announced a settlement with at least 12 claimants in Illinois for an undisclosed sum. Although the sum of the settlement was undisclosed, Honeywell "indicated the payout [wouldn't] hurt the company's bottom

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214 *See,* for example, "Honeywell International Inc. Lowers Q3, Full Year Earnings Guidance; Plans More Job Cuts," *Reuters Significant Developments*, September 19. 2001; "Honeywell lowers forecast, plans to cut jobs," *MediaCorp News*, September 20, 2001; Analyst report on Honeywell, UBS Warburg, September 21, 2001.

215 A search for "Honeywell" and "asbestos" in headlines and lead paragraphs of articles published in 2002 produced 242 news stories. The news search was done through Factiva, a provider of news and information sources. A search for the word "asbestos" in Honeywell analyst reports published in 2002 produced 69 results. The search was done through Thomson Reuters, a provider of company analyst reports from brokers.

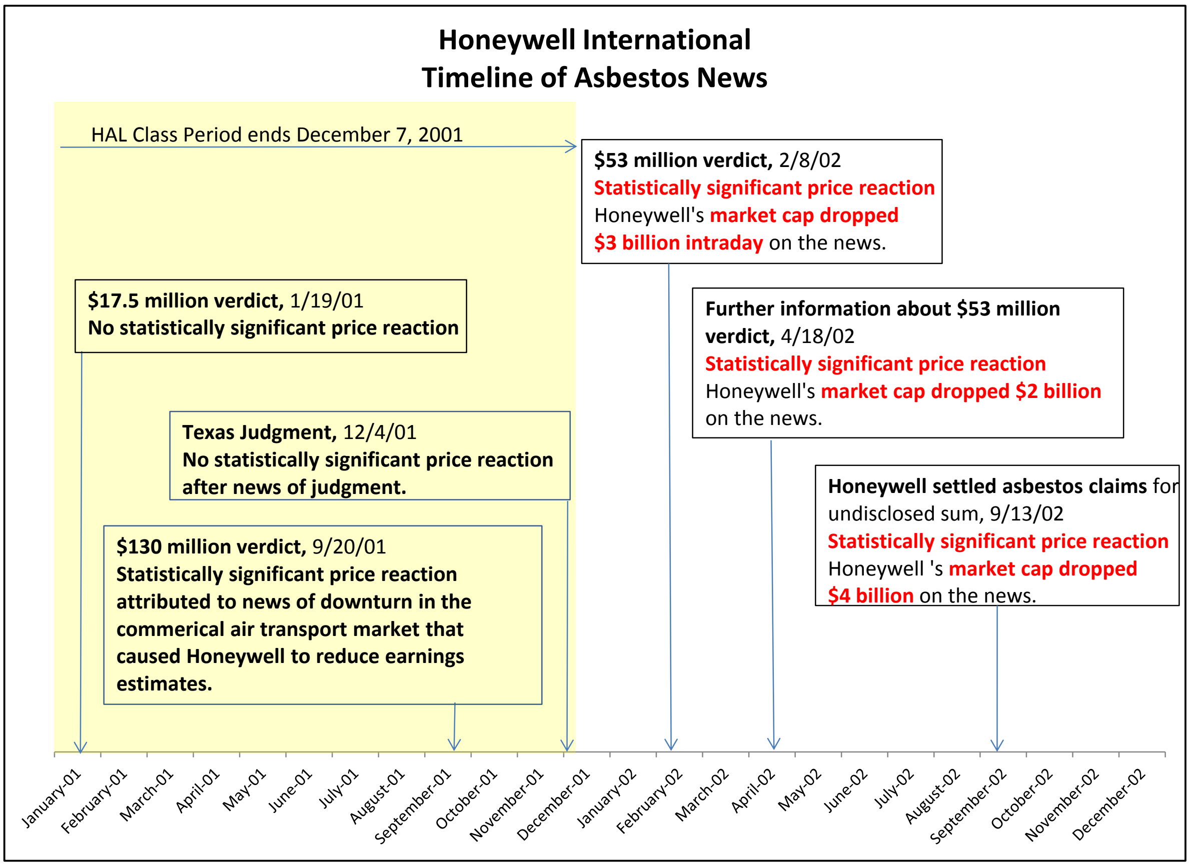
216 "New York City jury awarded $53.5 million to a family of a man who died of asbestos exposure," *CNBC*, February 8, 2002.

217 "Honeywell says asbestos verdict was more than it had disclosed," *New York Times*, April 18, 2002 ("Honeywell's **stock dropped as much as 11 percent on Feb 8 when judgment was announced, shaving $3 billion off its market value**; shares quickly rebounded after company said it has been found liable for less than $1.1 million of verdict.") (emphasis added).

218 "Honeywell says asbestos verdict was more than it had disclosed," *New York Times*, April 18, 2002.

line."[219] Honeywell's stock price had a statistically significant price drop after the announcement of this settlement.

253. The chart below summarizes Honeywell's asbestos news during and after the class period:



Dow Chemical

254. Dow Chemical did not report or discuss its asbestos liabilities at all in 2001 despite having a large exposure to asbestos. Starting right after the end of the class period, Dow had statistically significant price reactions and sharp increases in implied volatility attributed to fears about its asbestos liabilities.

[219] "Honeywell settles asbestos lawsuits with several plaintiffs," *Associated Press*, September 13, 2002.

255. Dow Chemical's asbestos liability stemmed from its acquisition of Union Carbide completed on February 6, 2001.[220] At the end of 2001, Dow Chemical had $233 million in estimated asbestos liability.[221]

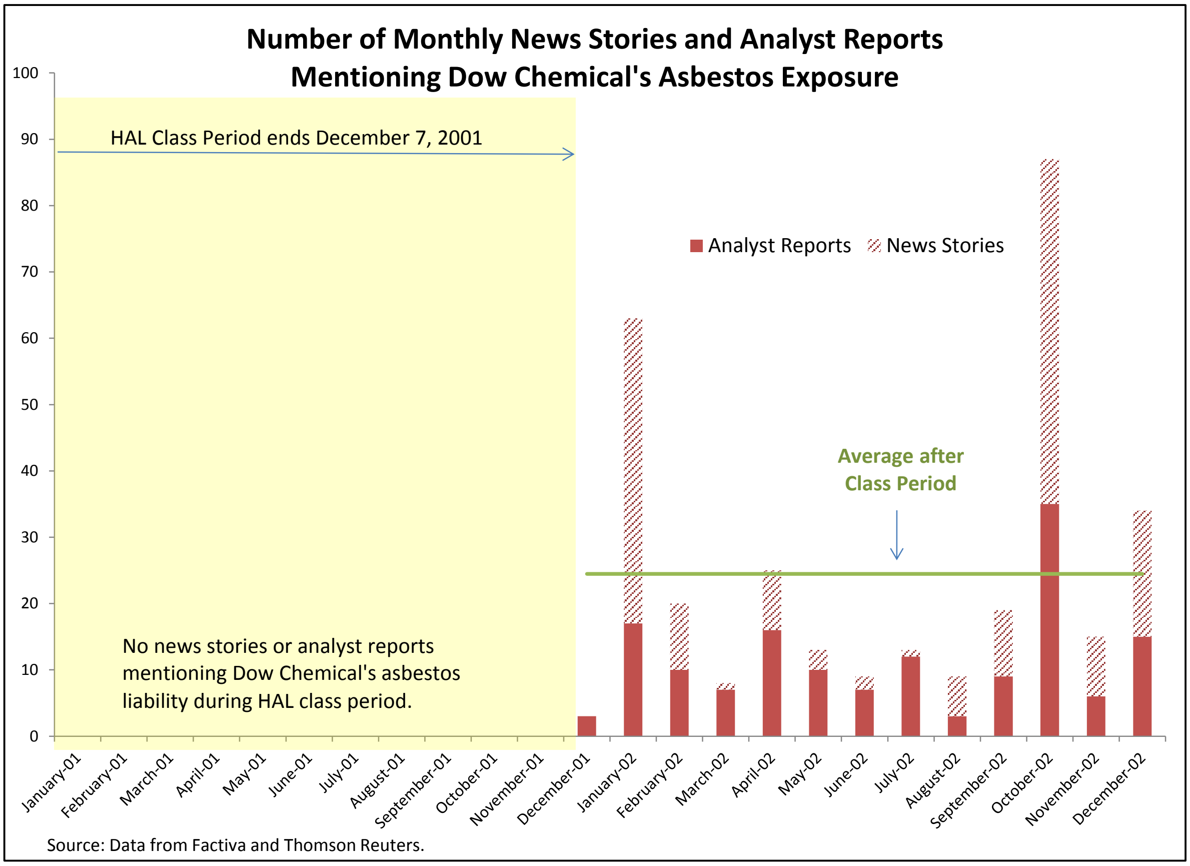
256. Dow Chemical made no disclosures about its asbestos liability in its SEC filings until after the class period and there was no mention of Dow Chemical's or Union Carbide's asbestos exposure in news stories or analyst reports during the class period.[222] In contrast, from the end of the class period through 2002, there were over 100 news articles and over 100 analyst reports discussing Dow Chemical's asbestos exposure.[223] The chart below illustrates this dramatic shift in news coverage about Dow Chemical's asbestos exposure:

[220] Dow Chemical 2001 Form 10-K405, filed March 20, 2002.

[221] "Thinking About Asbestos," Lehman Brothers, March 20, 2002.

[222] A search for "Dow Chemical" and "asbestos" in headlines and lead paragraphs of articles published from January 1, 2001 to December 7, 2001 produced 4 news stories. None of these articles discuss Dow Chemical's asbestos exposure. A similar search for "Union Carbide" and "asbestos" produced one news story. This news story did not discuss Union Carbide's asbestos exposure. The news search was done through Factiva, a provider of news and information sources. A search for the word "asbestos" in Dow Chemical analyst reports issued from January 1, 2001 to December 7, 2001 produced zero results. The search was done through Thomson Reuters, a provider of company analyst reports from brokers.

[223] A search for "Dow Chemical" and "asbestos" in headlines and lead paragraphs of articles published from December 8, 2001 to December 31, 2002 produced 168 news stories. A search for the word "asbestos" in Dow Chemical analyst reports issued between December 8, 2001 and December 31, 2002 produced 150 results.



257. In addition to an increase in news coverage about Dow Chemical's asbestos exposure, starting a month after the end of the class period, Dow Chemical stock began reacting with statistically significant negative price reactions following asbestos events and news.

258. On January 9, 2002, Dow Chemical announced that it had reached an undisclosed settlement in an asbestos lawsuit in Texas.[224] Dow Chemical's stock had a statistically significant negative price reaction after the announcement and implied volatility of its stock increased 18%. Like Halliburton (but on different dates), Dow's implied volatility increased sharply following news of uncertainty regarding asbestos liability. News stories attributed the price drop to fears over the company's asbestos liabilities.

> **Dow Chemical Co's stock slid 8.65% Thursday amid investors fears over the company's asbestos liabilities**. Dow reached an undisclosed settlement Wednesday in an asbestos lawsuit filed in Texas against Union Carbide Corp,

[224] "Dow Chemical Settles Texas Asbestos-Related Suit," *Dow Jones Business News*, January 9, 2002.

> which Dow acquired last year. But the suit raised concerns about other possible liabilities.[225]

259. On January 14, 2002, UBS downgraded Dow Chemical because of uncertainty surrounding the company's asbestos liabilities.[226] Dow Chemical had a statistically significant negative price reaction after the downgrade and the implied volatility of its stock increased 14%. News stories attributed the price drop to fears over the company's asbestos liabilities:

> Dow Chemical shares on the NYSE **fell another 10.58%** ($3.20) to close at $27.05 Monday **amid concerns over asbestos related liabilities.** Its stock, which had been as high as $35.50 as recently as Jan 3, has been on a free-fall since Jan 9 when it reached an undisclosed settlement on an asbestos-related case in Texas. **The drop accelerated Monday when UBS Warburg downgraded it to hold from a strong buy**, and reduced its price target to $30 from $45/share. Dow Chemical's 52-week high on the NYSE was $39.67. **The UBS report said it downgraded Dow Chemical because of "uncertainty surrounding asbestos, including concerns triggered by increased court filings against wholly-owned Union Carbide,"** which Dow Chemical acquired last year. **The report noted an acceleration in asbestos-related court filings: it said that number averaged 30 from January through October 2001, but picked up to 400 in November - and soared to 905 in December**. "Since raising the asbestos issue with Dow Chemical in early December 2001, we have yet to resolve our concerns despite ongoing conversations with Dow, advice from the legal community, and other intense research efforts," the UBS report said. **UBS said that "absent comforting details" its reduced its price target "may continue to reflect uncertainties and investor sentiment. One could argue the stock already reflects a worst imaginable asbestos liability, losing about $5-bil in value recently.** However, potential economic liability and stock behavior are not necessarily connected in the expansive world of asbestos litigation."[227]

> **"Fears that Dow Chemical Co. could face huge asbestos liabilities knocked as much as 14 percent off the company's already battered stock price on Monday**, **while a leading analyst downgraded the second largest U.S. chemical concern**. The drop is the latest in a steep slide that began after the Midland, Michigan-based company reached a settlement last Wednesday in an asbestos lawsuit filed in Texas against Union Carbide Corp., which it acquired last year. **Since the settlement, shares have dropped about 22 percent, wiping almost $7 billion from the company's stock market value."**[228]

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[225] "Dow Chemical share price slides on asbestos concerns," *Platts Comomodity News*, January 10, 2002.

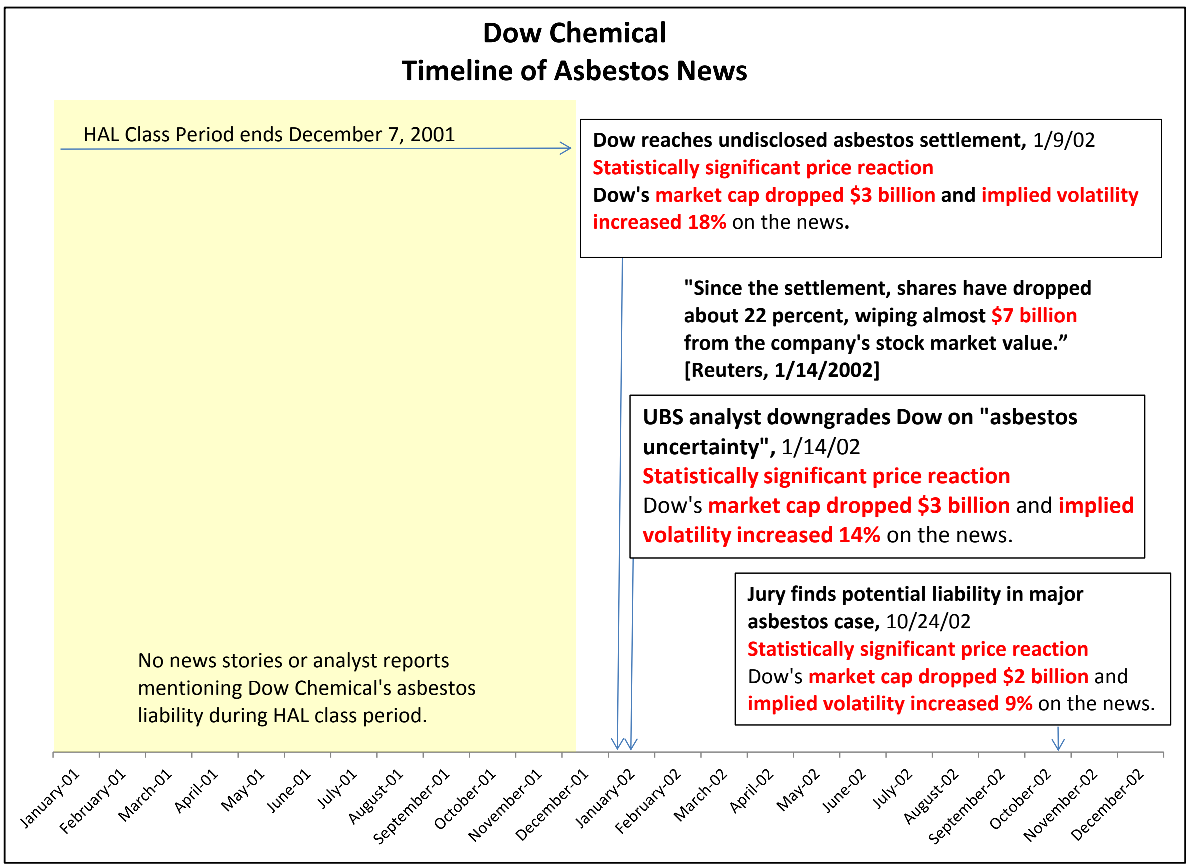
[226] Analyst report on Dow Chemical, UBS Warburg, January 14, 2002.

[227] "Dow stock keeps sliding as asbestos questions go unanswered," *Platts Commodity News*, January 14, 2002.

[228] "Dow stock battered by asbestos concerns," *Reuters*, January 14, 2002.

260. On October 24, 2002, a jury in West Virginia found Dow Chemical liable in an asbestos case. Although only potential liability had been found and an award had yet to be determined, Dow Chemical's stock had a statistically significant negative price reaction after the news, and its implied volatility increased 9%. News stories attributed the price drop to the negative verdict and the uncertainty surrounding the company's asbestos liabilities.[229]

261. The chart below summarizes Dow Chemical asbestos news before and after the class period. As shown below, starting right after the end of the class period, Dow had statistically significant price reactions and sharp increases in implied volatility attributed to fears about asbestos liabilities.



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229 "Dow found liable in West Virginia asbestos case," *Agence France-Presse*, October 24, 2002; "'Potential liability' found in UCC asbestos case," *Platts Commodity News*, October 24, 2002.

3M

262. 3M, a codefendant in Halliburton's Mississippi verdict, had no price reaction after the Mississippi verdict was announced, but had a price reaction weeks after the end of the class period on fears of asbestos without any additional specific news.

263. 3M was a codefendant with Halliburton's subsidiary Dresser Industries in the verdict rendered October 26, 2001 in Mississippi, which awarded $150 million to six plaintiffs. As discussed above, the news of this verdict was first announced on October 28, 2001 in the *Clarion-Ledger*, a Mississippi state-wide newspaper.[230] On the following day, October 29, 2001, 3M announced the $150 million verdict award and its $22.5 million share of the verdict.[231] 3M had no statistically significant price reaction following the announcement.

264. Only after Halliburton's December 7, 2001 announcement did analysts covering 3M analysts start focusing on 3M's asbestos liabilities, and 3M's stock price began experiencing statistically significant declines following asbestos news and events. For example, on January 16, 2002, analysts expressed concern about 3M's asbestos uncertainty.[232] On this date, 3M shares had a statistically significant price decline, and its implied volatility spiked 32%. Like Halliburton (but on different dates), 3M's implied volatility increased sharply following news of uncertainty regarding asbestos liability:

> **Wall Street analysts are also seeking any hint that liabilities are rising […] The stigma spread to others with current asbestos exposure, such as manufacturing conglomerate 3M and Dow, the world's largest chemicals group.** Since settling a Texas lawsuit for an undisclosed amount, Dow's shares have fallen about 30 per cent from about $34 to $25.66 per share yesterday. **In one week, 3M shares have fallen about 9 per cent to near $104 per share, despite no new developments on asbestos since a $22.5m verdict against it in October.**[233]
>
> 3M Co. moved quickly Friday [January 18] to subdue fears that asbestos litigation involving its masks and respirators could spiral out of control. **The legal issues aren't new -** 3M has handled tens of thousands of similar cases over two decades, it revealed recently **-** and 3M insists the problem is manageable […] **But the**

[230] "Asbestos case leads to $150 M jury award," *The Clarion-Ledger*, October 28, 2001.

[231] "3M to appeal asbestos case ruling," *Associated Press*, October 29, 2001.

[232] "3M raises earnings outlook, but stock falls on analyst's cut," *Associated Press*, January 16, 2002.

[233] "Asbestos casts shadow over US corporations," *Financial Times*, January 18, 2002 (emphasis added).

> **fever among investors is real, and so is the pressure on 3M's stock.** On Jan. 4, 3M's shares closed at a generous $117.10 as investors looked past expected weak results to a global recovery. On Thursday, the stock traded as low as $100, **a 14.6 percent slide. Analysts attributed the lions' share of the fall to litigation concerns.** One analyst, otherwise enthusiastic about 3M's prospects, went so far as to suspend his 'strong buy' rating.[234]

c. Statistical analysis of price movements of companies with asbestos exposure confirms the change in asbestos environment at the end of the class period

265. Further evidence that expectations about asbestos litigation were changing at the end of the class period is provided by the analysis of the relationship between the movements of Halliburton's stock price and the movements of the stock prices of companies whose asbestos liability was discussed by analysts. Halliburton's stock and the stock of companies whose asbestos exposure was discussed by analysts moved more tightly together in the year following the class period than during the class period, *i.e.*, they moved in the same direction more often in the year following the class period than during the class period.[235]

266. The analysis was conducted using three statistical techniques. All use the index of companies with asbestos exposure described in the methodology section above. (As a reminder, the index of asbestos companies is comprised of 31 companies with asbestos exposure in 2001 and 2002 based on a search of analyst reports in those years with asbestos in the title.[236]) All three techniques lead to the same conclusion: the relationship between the stock price of Halliburton and the stock prices of other companies with asbestos exposure changed and became tighter after the end of the class period.

267. The first technique is correlation: the index of companies with asbestos exposure shows a marked increase in the correlation with Halliburton after the class period. Specifically, the correlation between Halliburton and the asbestos index went from 25% during the class

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[234] 3M Moves to Subdue Fears Over Asbestos Lawsuits Involving Masks, Respirators" *Pioneer Press*, January 19, 2002 (emphasis added).

[235] During the class period the asbestos index did not add further explanatory power to the model beyond that of the energy and E&C indices. See Exhibit 2. When it is the only index used, then the asbestos index does have some explanatory power during the class period.

[236] *See* footnote 21 in the methodology section.

period to 61% in the year after the class period, indicating a tighter relationship after the class period.[237,238]

268. The second technique is based on the estimation of the percent of movement in Halliburton's stock price that is explained by the movement in the asbestos index; this percent is known as the R-squared. A comparison of the R-squared during the class period to the R-squared in the year after the class period also shows that the relationship was tighter after the class period: the amount of movement in Halliburton's stock price that is explained by the movement in the asbestos index went from 6% during the class period to 37% in the year after the class period.

269. The third technique uses a commonly accepted statistical test devised to detect changes in statistical relationship, known as a Chow test.[239] Specifically, I tested whether the relationship during the class period is different from the relationship in the year that followed the end of the class period.[240] The results of the Chow test show that the relationship between Halliburton's stock price and the asbestos index during the class period was statistically significantly different from the relationship in the year that followed the end of the class period at the 99.99% level and that the latter relationship was tighter.[241]

270. Importantly, further analysis shows it was *not* just Halliburton that had a tighter relationship with companies with asbestos exposure after the class period: generally the other companies with asbestos exposure also moved more tightly together. Specifically, we analyzed whether each of the 31 companies with asbestos exposure had a higher or lower correlation with the other 30 during the class period or after. Each of the 31 companies with asbestos exposure was positively correlated with the index of the other 30 companies both during and in the year

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[237] Excluded are the days of the alleged misrepresentations, alleged corrective disclosures and December 10, 2001 (day on which Halliburton's stock price rebounded).

[238] As a robustness check, I repeated the analysis by using only the subset of companies identified with analyst reports issued before the end of the class period and found results that are qualitatively similar.

[239] *See*, for example, William H. Greene, *Econometrics Analysis* (Pearson, 7th ed., 2012), 168-175.

[240] I excluded alleged misrepresentations, alleged corrective disclosures and December 10, 2001 (day on which Halliburton's stock price rebounded) from the analysis.

[241] As a robustness check, we performed additional Chow tests: we added to the Chow tests described above the energy index and the E&C index described in the methodology section. Again the Chow test shows that the relationship between Halliburton's stock price and the indices during the class period was statistically significantly different from the relationship in the year that followed the end of the class period at the 99.99% level and that the latter relationship was stronger for the asbestos index.

after the class period, but the correlation in the year after the class period was higher for 29 of these companies, demonstrating that companies with asbestos exposure generally moved more tightly together after the class period.

271. In sum, these statistical analyses of the stock prices of Halliburton and other companies whose asbestos exposure was discussed by analysts show that there was a change at the end of the class period affecting companies other than Halliburton and suggesting that the stock prices of companies with asbestos exposure were more affected by asbestos issues after the end of the class period than during the class period. This is further evidence that there was a change regarding the effect of asbestos on stock prices at the end of the class period. The fact that this change affected companies other than Halliburton is evidence that the change was not due to Halliburton's alleged misrepresentations.

d. Mentions of asbestos in business publications and analyst reports shows a dramatic change in the focus on asbestos occurring right at the end of the class period

272. Further evidence that a change in the asbestos environment occurred at the end of the class period is the dramatically increased focus on asbestos in business publications occurring right at the end of the class period. This change in the stock market's perception of the importance of asbestos demonstrates that a price reaction after asbestos news at the end of the class period is not evidence that the market would have reacted earlier to the same information (even if that information could have been disclosed earlier). Therefore, even if the verdict news announced at the end of the class period were corrective, the price decline after this announcement is not evidence that the same announcement would have any price impact earlier in the class period (including at the time of the alleged misrepresentations).

273. The number of articles in business publications mentioning asbestos increased substantially right after the end of the class period.[242]

274. In particular, during the class period there were on average 42 articles each month mentioning asbestos while during the year immediately following the end of the class period this number increased to 219 articles—more than five times the class period average.

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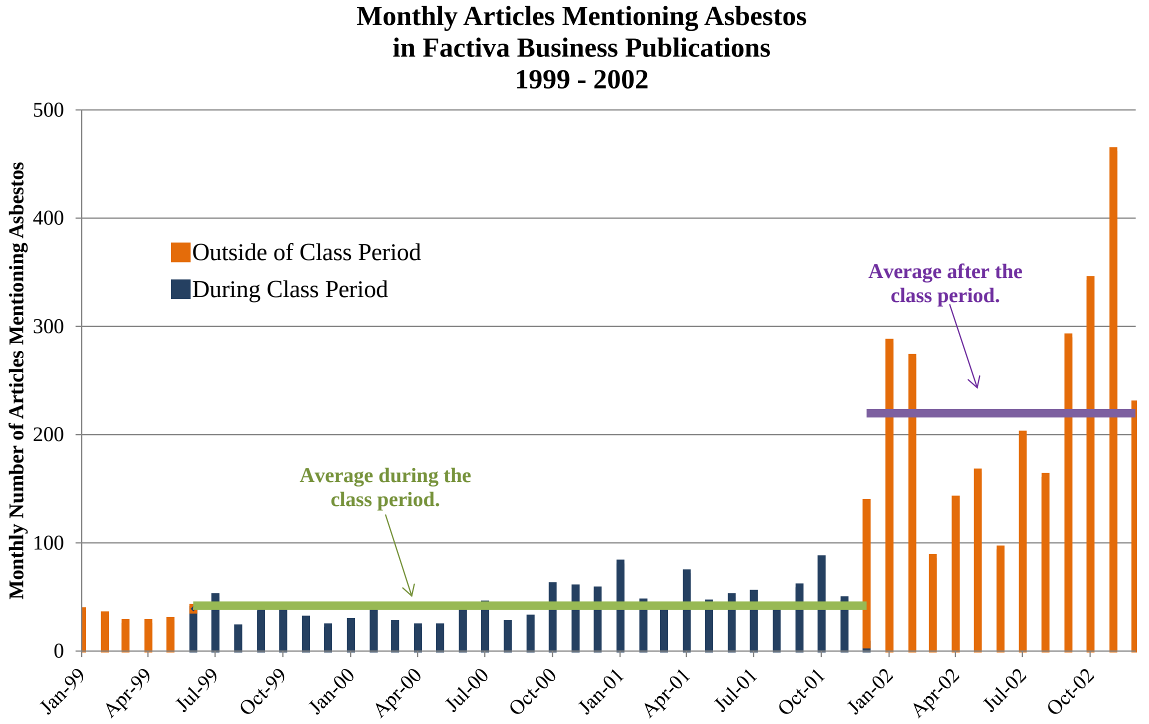
[242] News articles obtained through Factiva, an online news reporting service and archive, based on search for "asbestos" in print articles published by *Barron's*, *Dow Jones Institutional News*, *The Financial Times*, *Forbes*, *Reuters News*, and *The Wall Street Journal*.

275. During the two months preceding the December 7, 2001 alleged corrective disclosure, there were 111 articles in business publications mentioning asbestos. In the first two months after the end of the class period, this number increased to 442 articles—almost four times as many.



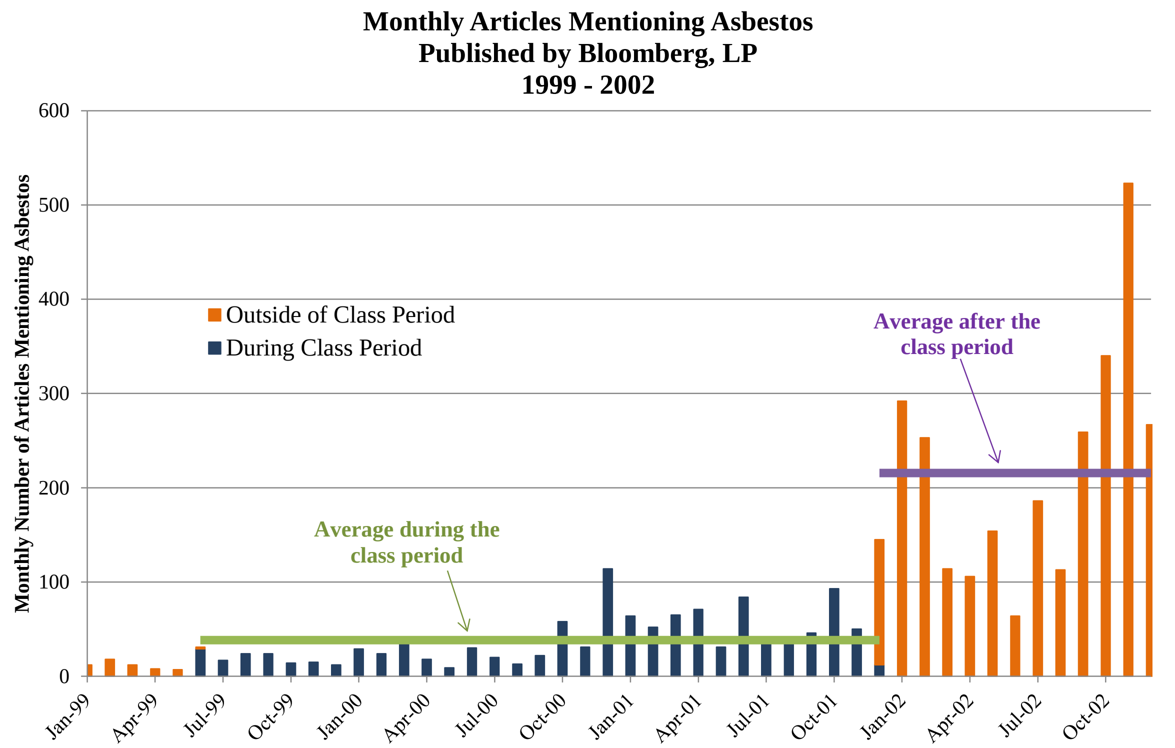
Notes and Sources:
Articles from Factiva.
Searched "asbestos" in print articles published by *Barron's, Dow Jones Institutional News, The Financial Times, Forbes, Reuters News, and the Wall Street Journal*.

276. Similarly, the number of articles mentioning asbestos in Bloomberg L.P., a commonly used provider of financial data and news, increased substantially right after the end of the class period.[243]

277. In particular, during the class period there were on average 38 articles in Bloomberg each month mentioning asbestos, while during the year immediately following the end of the class period this number increased to 216 articles—more than five times the class period average.

[243] News articles obtained from Bloomberg L.P. based on search for "asbestos" in articles published by *Bloomberg News*.

278. During the two months preceding the December 7, 2001 alleged corrective disclosure, there were 137 articles mentioning asbestos in Bloomberg. In the first two months after the end of the class period, 447 articles were published—more than three times as many.

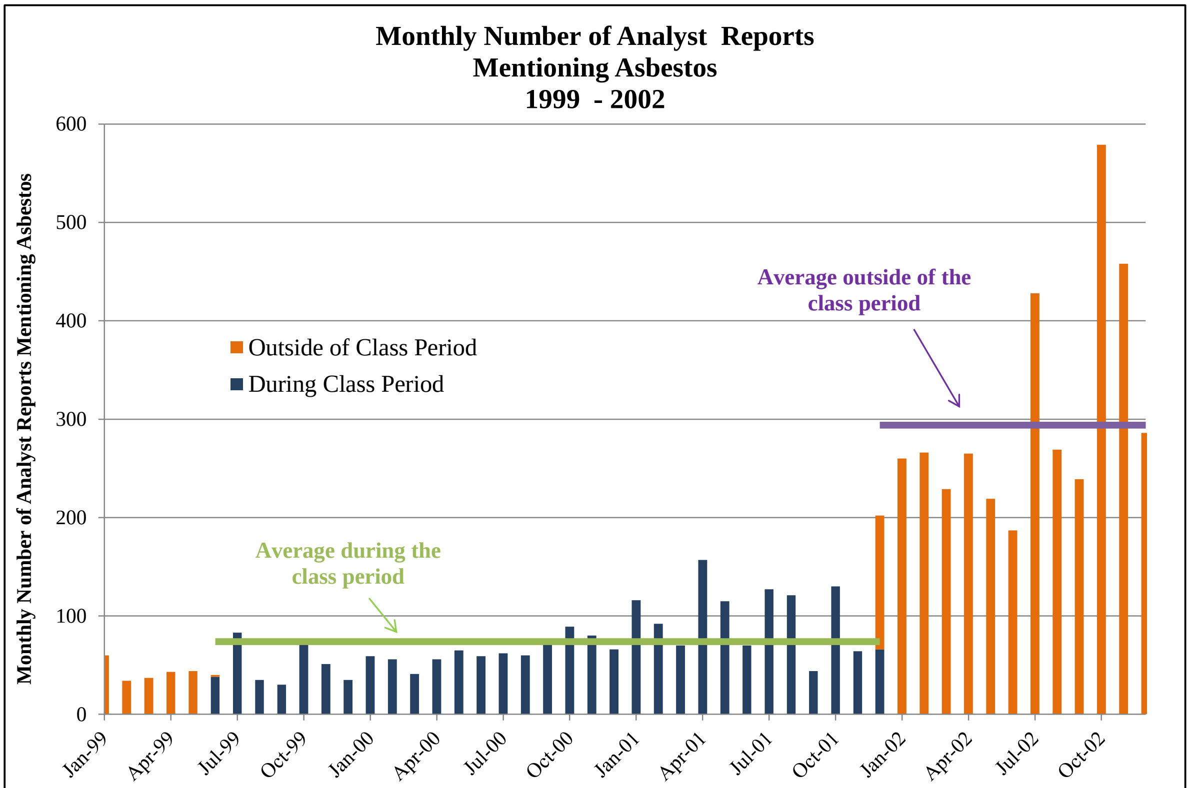


Notes and Sources:
Articles from Bloomberg, L.P.
Searched "asbestos" in articles published by Bloomberg News.

279. Additionally, the number of analyst reports mentioning asbestos increased substantially right after the end of the class period.[244] In particular, during the class period there were on average 74 analyst reports each month mentioning asbestos. During the year immediately following the end of the class period, this number increased to 293 articles, four times the class period average.

[244] Analyst reports obtained from Thomson Reuters, a media and financial information firm, based on search for “asbestos” in the title or text.

280. During the two month preceding the December 7, 2001 alleged corrective disclosure, there were 245 analyst reports mentioning asbestos. In the first two months after the end of the class period, 442 articles were published—almost twice as many.



Notes and Sources:
Analyst report lists from Thomson Reuters.

B. There is no price impact from any alleged misrepresentation regarding the risk that Halliburton would have to pay post-1992 Harbison-Walker claims

Alleged Misrepresentation	Alleged Corrective Disclosure
Halliburton misrepresented its asbestos liability because it failed to account for post-1992 claims against Harbison-Walker. After it disclosed Harbison-Walker's request for assistance, Halliburton understated its liability for the Harbison-Walker claims.[245]	Halliburton announced on June 28, 2001, that Harbison-Walker requested the Company provide claims management and financial assistance. Halliburton reported on August 9, 2001, that it increased its asbestos reserve to $124 million. Halliburton announced on October 30, 2001 an adverse verdict rendered on October 25, 2001 in Holmes County, Mississippi. Halliburton announced on December 4, 2001 adverse judgments rendered on November 29, 2001 in Orange County, Texas. Halliburton announced on December 7, 2001, an adverse verdict rendered on December 5, 2001 in Baltimore, Maryland.

1. The June 28, 2001 alleged corrective disclosure—when the Company disclosed that Harbison-Walker had requested that Halliburton provide Harbison-Walker with financial assistance for the post-1992 claims—was not corrective of any alleged misrepresentation

281. The Fund alleges that on June 28, 2001, Halliburton issued a press release that "for the first time revealed that a former Dresser subsidiary [Harbison-Walker] had been requesting Halliburton's financial help in dealing with an increasing number of asbestos claims, even though they had known this throughout the Class Period."[246]

282. The Complaint does not allege that Halliburton made any statement prior to June 28, 2001 that misrepresented any communication between Harbison-Walker and Halliburton, or the relationship between Harbison-Walker's and Halliburton's asbestos liabilities. There is no

[245] While this section focuses on the June 28, 2001 and August 9, 2001 announcements, the analysis discussed above in Section A applies to all of the allegations concerning Halliburton's disclosed asbestos liability, including the Fund's allegations that Halliburton misstated its liability for the Harbison-Walker claims.

[246] Complaint, ¶37. To the extent the Fund claims that Halliburton's misrepresented its liability for the Harbison-Walker claims from June 28, 2001 to the end of the class period, such allegations are addressed in Part A above.

indication from my review of the public record that the market believed Halliburton released information on June 28, 2001 that revealed a prior falsity.

283. To the contrary, investors were aware of the indemnity relationship between Harbison-Walker and Halliburton-subsidiary Dresser throughout the class period. The risk that Halliburton would have to pay Harbison-Walker post-1992 claims was previously disclosed to no statistically significant price reaction (before or after the adjustment for multiple comparisons)[247] and to no market commentary. In particular, this risk was disclosed prior to the class period in Halliburton's first quarter 1999 10-Q filed on May 14, 1999. The 10-Q stated:

> Pursuant to an agreement entered into at the time of the spin-off, Global [Harbison-Walker's parent company] assumed liability for asbestos related claims filed against Dresser after July 31, 1992 relating to refractory products manufactured or marketed by the Harbison-Walker-Refractories Division of Dresser. These asbestos claims are subject to certain agreements with insurance carriers that cover expense and indemnity payments. **Global now disputes that it assumed responsibility for any of such asbestos claims based on negligence.** Global also now asserts certain other claims relating to the insurance coverage responding to asbestos claims. [Halliburton 1Q99 10-Q filing, 5/14/1999, emphasis added]

284. Halliburton continued to update the status of this litigation in its SEC filings. Halliburton stated in a 10-Q filed on August 13, 1999 that it expected Global (Harbison-Walker's parent company) to claim in excess of $40 million for post-1992 asbestos claims it had already resolved, informing investors about the potential magnitude of Harbison-Walker's post-1992 liability almost two years prior to the alleged corrective disclosure. There was no statistically significant price reaction after this announcement (before or after adjustment for multiple comparisons)[248] and no analyst commented on this issue.

> Global assumed liability for all asbestos related claims filed against Dresser after July 31, 1992 relating to refractory products manufactured or marketed by the former Harbison-Walker Refractories division of Dresser… Global now disputes that it assumed liability for any of these asbestos claims… Global has not claimed a specific amount of damages. We expect that Global's claim for reimbursement will be in excess of $40 million. [10-Q, filed August 13, 1999]

[247] *See* Exhibit 1. Ms. Nettesheim's event study did not analyze the price reaction following this announcement.

[248] *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction after this announcement. Nettesheim Report, Exhibit 17.

285. The Company disclosed in its third quarter 2000 10-Q filed on November 9, 2000 that the dispute over the Harbison-Walker post-1992 claims had been resolved and that Global acknowledged its obligation to assume responsibility for these claims. Again, there was no statistically significant price movement (before or after the adjustment for multiple comparisons)[249] or market commentary when the Company disclosed that the dispute over the Harbison-Walker post-1992 claims had been resolved. This is evidence that there was no price impact from any alleged misrepresentation concerning Harbison-Walker.

286. Analysts' reaction to the Company's June 28, 2001 press release also supports a lack of price impact from any related alleged misrepresentation. Analysts did not indicate that they were previously misled by Halliburton, or give any indication that they did not believe management's representation that this was "an unexpected development:"[250]

> **We do not believe that Halliburton's asbestos exposure, including HW [Harbison Walker], presents a material risk** and reiterate our Buy opinion. [Salomon Smith Barney, 6/29/2001, emphasis added]
>
> While **insignificant by itself,** it does remind people of HAL's asbestos liabilities and could depress its multiple as these concerns rear their head again. [Deutsche Bank, 6/29/2001, emphasis added]
>
> **We do not believe HAL will be materially impacted by this case**. However, asbestos will be a recurring issue. [Merrill Lynch, 6/29/2001, emphasis added]
>
> **We continue to believe asbestos is a virtual non-issue for HAL**. Since 1976 the company has settled or disposed of 165,000 claims at a total cost of $124 mm ($32 mm, net of insurance), with another $29 mm reserved for additional claims. [Morgan Stanley Dean Witter, 6/29/2001, emphasis added]

287. Subsequent analyst commentary discusses why Halliburton did not previously include post-1992 Harbison-Walker claims in its liability estimates, and that changed circumstances led to the change in disclosure:

> In its previous SEC filings, Halliburton did not include any of the above H-W asbestos claims, or its estimated liability, due to its reliance on the defense and indemnity obligations H-W assumed under its 1992 spin-off agreement. However, H-W no longer

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[249] *See* Exhibit 1. Ms. Nettesheim's event study similarly did not find a statistically significant price reaction after this announcement. Nettesheim Report, Exhibit 17.

[250] Halliburton Form 8-K, filed on July 28, 2001.

> appears to have the financial ability to comply with its defense and indemnity obligations. [A.G. Edwards, 8/10/2001]

288. Harbison-Walker's costs per resolved claim were substantially higher than Halliburton's. Analysts stated that it may be a positive for Halliburton to step in to manage Harbison-Walker's asbestos claims because the Company had a better strategy for managing claims than Harbison-Walker:

> Dresser/Halliburton has historically been successful in managing the asbestos claims against it; and […] Harbison has had no coordinated defense strategy in dealing with these claims, resulting in higher settlement and disposal costs to Harbison than have been historically realized by Dresser/Halliburton. [Morgan Stanley, 6/29/2001]

> If the company determines that it is in its interest to do so, it may take over the management and resolution of the claims against Harbison. At present, there are about 165,000 open claims, for which approximately 52,000 are in the process of being settled. [Salomon Smith Barney, 6/29/2001]

> H-W's [Harbison-Walker] average historical claim settlements have been significantly higher than HAL's experience with similar claim settlements. [A.G. Edwards, 8/10/2001]

> One of the reasons Halliburton decided to step in…was its belief that Harbison was not providing adequate defense and was settling its claims at too high a cost…[Halliburton's] defense strategy is one of the most aggressive in the industry. This is one of the reasons why its settlement costs per claim is so much lower than those of other defendants. If Halliburton is successful in executing this strategy vis-a-vis the Harbison-Walker claims, then investors should feel more comfortable that the company can limit the future potential liability and perhaps even shrink the current liability on its balance sheet. [UBS Warburg, 10/24/2001]

289. After making an appropriate multiple comparison adjustment, there is no statistically significant price reaction following the June 28, 2001 announcement. When tested in isolation, the price reaction following the June 28, 2001 announcement is statistically significant, but that may likely be a statistical fluke because there were 35 tests of statistical significance performed. After the appropriate adjustment for 35 multiple comparisons, the price reaction after this announcement was not statistically significant. *See* Exhibit 1 for details. This lack of statistical significance does not support price impact of the alleged asbestos misrepresentations.

290. In summary, there is no analyst commentary after Halliburton's June, 28, 2001 press release indicating that the market believed that the announcement revealed any falsity of a prior statement concerning Halliburton's asbestos liability. Rather, analysts explained why Halliburton did not previously include any post-1992 Harbison-Walker claims in its reported asbestos liability, and that changed circumstances led to the change in disclosure. Also, the fact that after making an appropriate statistical adjustment for multiple tests, there is no statistically significance price reaction after the June 28, 2001 alleged corrective disclosure demonstrates that that there was no price impact from the Fund's alleged misrepresentations regarding an undisclosed risk that Halliburton would have to pay Harbison-Walker post-1992 claims. Finally, when Halliburton had previously disclosed that it could potentially be held liable for post-1992 Harbison-Walker claims, the stock price did not react significantly. Therefore, the June 28, 2001 alleged corrective disclosure provides no evidence of price impact from the alleged misrepresentations regarding an undisclosed risk that Halliburton would have to pay Harbison-Walker post-1992 claims.

2. The August 9, 2001 alleged corrective disclosure—in which the Company's Form 10-Q reported an increase in its reported asbestos liability—can provide no evidence of price impact because the alleged corrective information was not new

291. The Fund claims that on August 9, 2001, "Halliburton filed its second quarter 2001 10-Q in which it increased reserves for asbestos liability to $124 – over twice the $60 million that, only two weeks prior, the company had assured investors would be accurate.[] The market then became alerted to the fact that the Company's asbestos situation was not in fact 'under control.'"[251]

292. There are several reasons why the alleged corrective disclosure on August 9, 2001 is not evidence that there was a price impact from Halliburton's alleged misrepresentations regarding an undisclosed risk that Halliburton would have to pay Harbison-Walker post-1992 claims.

293. First, there was *no new information* in the 10-Q regarding Halliburton's asbestos reserves or its liability for Harbison-Walker claims. Halliburton's reported asbestos liability as

[251] Lead Plaintiff's Reply in Support of its Motion for Class Certification, filed December 21, 2007, p. 21.

of the end of the second quarter 2001 had already been disclosed more than two weeks before Halliburton filed its 10-Q. Halliburton's net asbestos liability as of March 31, 2001 was $30 million. The $124 million in net liabilities reported in the August 9, 2001 10-Q thus represented an increase of $94 million from the prior period. This increase was almost entirely due to the $92 million *pre-tax* (or $60 million *after-tax*) amount the Company decided to record for pending Harbison-Walker claims, which it announced a few weeks earlier in July.

294. On July 25, 2001, Halliburton announced in a press release and conference call that it was going to add to its reserves an estimate for liability for post-1992 asbestos claims against Harbison-Walker. Halliburton disclosed that it had decided not to provide Harbison-Walker with financial assistance but thought it "was prudent to accrue [a] $60 million *after-tax*" charge:[252]

> Based on Halliburton's analysis of Harbison's asbestos claims management and concern that Harbison will not be able to fully perform its obligation to defend and indemnify Dresser, during the 2001 second quarter Halliburton accrued $60 million after-tax ($0.14 per diluted share) under discontinued operations which represents management's judgment of potential exposures, net of insurance recovery.[253]

295. The August 9, 2001 Form 10-Q then repeated this information, reporting that Halliburton "recorded as discontinued operations in the 2001 second quarter an accrual of $92 million ($60 million, after tax) for potential liabilities for open and settled asbestos claims at June 30, 2001."

296. The $60 million figure announced in the August 9, 2001 alleged corrective disclosure is not new information as it refers to the exact same amount announced in the July 25, 2001 press release. In an efficient market only new news should affect the stock price[254] and given the Fund's own conclusion that Halliburton traded in an efficient market where "successive announcements of the same information will have no additional effect on share price,"[255] this information would have already been reflected in the stock price. In addition, there was no statistically significant price movement on July 25, 2001, when the allegedly

[252] Halliburton Conference Call, July 25, 2001.

[253] Halliburton Press Release, July 25, 2001.

[254] *See,* for example, Richard A. Brealey, Stewart Myers & Franklin Allen, *Principles of Corporate Finance* (McGraw-Hill: New York, 11th ed., 2014), 321-341.

[255] Nettesheim Report, ¶40.

corrective information was first announced. This affirmatively demonstrates that the allegedly corrective information announced on August 9, 2001 did not have a price impact.

297. Analysts understood from the July 25, 2001 press release and conference call that Halliburton decided it would not relieve Harbison-Walker from its obligations, and that the $60 million charge was an estimate of Harbison-Walker pending claims in case Harbison-Walker became financially insolvent:

> Dresser **has reviewed this request and decided that it will not relieve Harbison from its obligation to indemnify and defend Dresser from such claims**, and it will not assist Harbison in paying settlements of asbestos claims Harbison has assumed. However, **given the likelihood that Harbison will not be able to fulfill its obligation, Halliburton decided that it would be prudent to accrue an amount that represents its potential liability.** [Dain Rauscher Wessels, 7/26/2001, emphasis added]

> Asbestos issue continues to bedevil the company: **Although HAL decided not to cover Harbison-Walker for its share of asbestos liabilities, it took a charge of $60 million to protect itself against the eventuality that it may have to.** HAL continues to pursue a strategy of litigating asbestos claims and so far this has paid off as only a few small claims have been paid out. We believe, however, that this issue is likely to be around for some time and may impact the multiple the stock is able to command. [Deutsche Bank, 7/26/2001, emphasis added]

> HAL **accrued $60 million after tax**, or $0.14 per share, under discontinued operations in order to reduce the company's financial exposure to potential litigation regarding asbestos claims against Harbison-Walker refractories, formerly owned by a Halliburton subsidiary, Dresser Industries. This **amount is management's best estimate of the company's financial exposure net insurance recovery in the event Halliburton must resolve Harbison's claims**. [Robinson Humphrey, 7/26/2001, emphasis added]

298. Second, the $60 million reserve discussed in the July 25, 2001 press releases was not represented by the Company or understood by the market to be Halliburton's total reserves for its pending asbestos liabilities. Instead the $60 million was related only to pending Harbison-Walker claims.

299. Finally, even though when tested in isolation the price reaction following the August 9, 2001 announcement was statistically significant, after the appropriate adjustment for 35 multiple comparisons, the price reaction after this announcement was not statistically significant. *See* Exhibit 1 for details. This, coupled with the reasons discussed above, shows that the August 9, 2001 alleged corrective disclosure provides no evidence of price impact from the

alleged misrepresentations regarding an undisclosed risk that Halliburton would be responsible for post-1992 Harbison-Walker claims.

300. In addition, for the same reasons explained above, October and December, 2001 verdict and judgment announcements were not corrective of the alleged misrepresentations related to Harbison-Walker liability.

C. There is no price impact from the alleged misrepresentation on October 23, 2001 that "there have been no adverse developments" with respect to the Harbison-Walker situation

Alleged Misrepresentation	Alleged Corrective Disclosures
Halliburton statement on October 23, 2001 that "there have been no adverse developments" was a misrepresentation.	Halliburton announced on October 30, 2001 an adverse verdict rendered on October 25, 2001 in Holmes County, Mississippi. Halliburton announced on December 4, 2001 adverse judgments rendered on November 29, 2001 in Orange County, Texas. Halliburton announced on December 7, 2001, an adverse verdict rendered on December 5, 2001 in Baltimore, Maryland.

301. Until the alleged corrective disclosures dated October 30, 2001, December 4, 2001, and December 7, 2001, Halliburton never made any statement during the class period about particular asbestos cases or the Texas, Mississippi, or Maryland cases, in particular, or any statements predicting the outcome of any particular case.

302. During an October 23, 2001 earnings call, Halliburton made no statement about any particular asbestos case and did not predict the outcome of any of the cases in Texas, Mississippi, or Maryland that the Company discussed in subsequent disclosures. Rather, the Company stated that "there have been no adverse developments" with respect to the "Harbison-Walker situation" and that there was not anything new to report with respect to Harbison-Walker other than new claim count information.

303. To the extent the Fund contends this statement was a misrepresentation because the Company did not discuss the September 2001 jury verdict in Texas, there could be no price

impact from any such misrepresentation. By the time of the October 23, 2001 earnings call, the Texas verdict was already disclosed and known to the market. As mentioned above, a September 20, 2001 Beaumont Enterprise article entitled "Orange jury set record for damages in asbestos lawsuit" reported that Dresser, Halliburton's subsidiary, was one of two defendants in the case. Further, the Texas verdict was publicly discussed the following day, September 21, 2001, in a report issued by Mealey's.

304. Analyst reports after the alleged misrepresentation explicitly mention the Texas verdict, including a Salomon Smith Barney analyst report issued on the very same day of the alleged misrepresentation and a UBS analyst report the following day:

> Although some investors are concerned over the implications of a recent large jury award to an asbestos claimant, the facts of the case remain unclear and HAL believes that the ruling is highly likely to be overturned on appeal. [Deutsche Bank, 10/5/2001]
>
> [D]uring the quarter the company was subject to an adverse jury verdict in Orange County, Texas. The jury found in favor of five plaintiffs and awarded $15 million in compensatory damages and $50 million in punitive damages. [Salomon Smith Barney, 10/23/2001]
>
> In the last month or so, the company lost a case in Texas, in which five Plaintiff were awarded $65 million by a jury. [UBS, 10/24/2001]

305. Analysts therefore knew of the Texas verdict, and there is no indication that analysts understood the Company's October 23, 2001 statement to indicate that there had been no adverse verdict in September.

306. Moreover, there was no statistically significant price reaction after the October 23, 2001 conference call (before and after the adjustment for multiple comparisons).[256] Accordingly, it could not have had any price impact.

Lucy P. Allen

[256] *See* Exhibit 1. Note that Ms. Nettesheim's event study similarly does not find a statistically significant price reaction after this announcement. Nettesheim Report, Exhibit 17.

Exhibit 1a

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Daily Returns (in logs): Halliburton	Daily Returns (in logs): S&P 500 Energy Index[2]	Daily Returns (in logs): Fortune E&C Index[3]	Excess Return[4]	t-stat[5]	Nettesheim Report[6]: z-score	Nettesheim Report[6]: Significant?	Statistically Significant?[7]: Before MC Adjustment	Statistically Significant?[7]: After MC Adjustment[8]
5/14/99	5/17/99	O1	-0.012	-0.003	-0.007	-0.006	-0.28	-	-	No	No
7/22/99	7/23/99	M1	0.001	0.006	-0.003	-0.006	-0.26	(0.59)	No	No	No
8/13/99	8/16/99	M2	-0.007	-0.008	-0.011	0.007	0.31	0.40	No	No	No
9/13/99	9/14/99	M3	-0.025	-0.004	0.000	-0.019	-0.84	0.92	No	No	No
10/4/99	10/5/99	D1	-0.142	-0.021	-0.029	-0.109	-4.77	(4.94)	Yes	Yes	Yes
10/21/99	10/22/99	M4	0.036	0.014	0.010	0.015	0.67	0.05	No	No	No
11/15/99	11/16/99	M5	-0.010	0.019	0.027	-0.041	-1.80	(1.25)	No	No	No
1/5/00	1/5/00	D2	-0.045	0.032	0.008	-0.090	-3.96	(2.48)	Yes	Yes	No[9]
1/27/00	1/28/00	M6	-0.046	-0.023	-0.016	-0.011	-0.50	(1.00)	No	No	No
3/14/00 [10]	3/15/00	M7	-0.015	0.007	0.025	-0.028	-1.23	1.00	No	No	No
4/26/00	4/27/00	M8	0.042	0.011	0.004	0.027	1.18	0.77	No	No	No
5/15/00	5/16/00	M9	-0.001	-0.014	0.011	0.017	0.75	0.85	No	No	No
7/26/00	7/27/00	M10	0.041	0.042	-0.012	-0.014	-0.63	0.54	No	No	No
8/10/00	8/11/00	M11	-0.022	-0.007	0.028	-0.017	-0.75	(0.84)	No	No	No
10/24/00	10/25/00	D3	-0.116	-0.012	-0.015	-0.097	-4.27	(3.60)	Yes	Yes	Yes
11/9/00	11/10/00	M12	-0.022	-0.002	-0.015	-0.016	-0.72	0.43	No	No	No
12/21/00	12/21/00	D4	-0.020	0.004	-0.006	-0.025	-1.09	(1.47)	No	No	No
12/22/00	12/22/00	D5	-0.027	0.019	0.035	-0.059	-2.58	(2.26)	Yes	Yes	No
1/30/01	1/31/01	M13	0.023	0.017	-0.003	0.000	-0.02	0.71	No	No	No
1/30/01	1/31/01	D6	0.023	0.017	-0.003	0.000	-0.02	0.71	No	No	No
3/27/01 [11]	3/28/01	M14	-0.032	-0.024	-0.003	0.001	0.05	0.42	No	No	No

Exhibit 1a

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Daily Returns (in logs): Halliburton	Daily Returns (in logs): S&P 500 Energy Index[2]	Daily Returns (in logs): Fortune E&C Index[3]	Excess Return[4]	t-stat[5]	Nettesheim Report[6]: z-score	Nettesheim Report[6]: Significant?	Statistically Significant?[7] Before MC Adjustment	Statistically Significant?[7] After MC Adjustment[8]
4/25/01	4/26/01	M15	0.087	0.010	0.015	0.071	3.13	2.26	Yes	Yes	No
5/11/01	5/14/01	M16	0.050	0.015	0.003	0.030	1.32	1.39	No	No	No
5/25/01	5/25/01	M17	0.020	0.000	-0.011	0.022	0.97	0.41	No	No	No
6/28/01	6/29/01	M18	-0.043	0.015	-0.006	-0.063	-2.78	(2.64)	Yes	Yes	No
6/28/01	6/29/01	D7	-0.043	0.015	-0.006	-0.063	-2.78	(2.64)	Yes	Yes	No
7/25/01	7/26/01	M19	0.036	0.014	-0.001	0.017	0.76	1.98	Yes	No	No
8/9/01	8/9/01	M20	-0.046	0.000	0.008	-0.047	-2.05	(3.03)	Yes	Yes	No
8/9/01	8/9/01	D8	-0.046	0.000	0.008	-0.047	-2.05	(3.03)	Yes	Yes	No
8/22/01	8/22/01	M21	-0.019	0.007	-0.011	-0.027	-1.19	(1.13)	No	No	No
9/4/01	9/5/01	M22	0.005	0.005	-0.010	0.000	-0.01	0.76	No	No	No
9/20/01	9/20/01	O2	-0.049	-0.030	-0.066	0.002	0.10	(1.84)	No	No	No
9/21/01	9/21/01	O3	0.046	-0.013	-0.012	0.067	2.93	0.93	No	Yes	No
10/4/01	10/4/01	M23	0.062	0.025	-0.017	0.030	1.33	0.42	No	No	No
10/23/01	10/24/01	M24	0.004	-0.010	-0.010	0.019	0.84	0.93	No	No	No
10/29/01	10/29/01	O4	-0.004	-0.006	-0.022	0.007	0.30	0.16	No	No	No
10/30/01	10/31/01	D9	-0.065	-0.003	0.041	-0.067	-2.95	(2.82)	Yes	Yes	No
11/1/01	11/1/01	D10	-0.029	0.021	0.038	-0.063	-2.79	(2.12)	Yes	Yes	No
11/8/01	11/9/01	M25	0.002	0.023	-0.006	-0.029	-1.28	(2.07)	Yes	No	No
12/4/01	12/4/01	D11	-0.007	0.014	0.019	-0.029	-1.29	(2.20)	Yes	No	No
12/5/01	12/5/01	D12	0.005	0.020	0.040	-0.029	-1.26	(2.27)	Yes	No	No

Exhibit 1a

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Daily Returns (in logs): Halliburton	Daily Returns (in logs): S&P 500 Energy Index[2]	Daily Returns (in logs): Fortune E&C Index[3]	Excess Return[4]	t-stat[5]	Nettesheim Report[6]: z-score	Nettesheim Report[6]: Significant?	Statistically Significant?[7] Before MC Adjustment	Statistically Significant?[7] After MC Adjustment[8]
12/7/01	12/7/01	D13	-0.552	0.014	-0.013	-0.570	-25.05	(24.81)	Yes	Yes	Yes
12/10/01	12/10/01	O5	0.154	-0.017	-0.014	0.180	7.90	-	-	Yes	Yes
5/22/02	5/22/02	O6	0.032	0.015	-0.023	0.015	0.68	-	-	No	No
5/28/02	5/29/02	O7	-0.033	0.004	0.006	-0.040	-1.74	-	-	No	No

Notes and Sources:

Data from FactSet Research Systems, Inc. and Bloomberg, L.P.

[1] Certain alleged misrepresentations and alleged corrective disclosures were made in analyst reports, SEC filings, presentations or annual reports, for which the time of publication was unavailable. For alleged misrepresentations, I assumed that analyst reports and presentations were made before or during market hours, and that SEC filings and annual reports occurred after market hours. Even under the alternative assumptions, my conclusions do not change. For alleged corrective disclosures (and for days containing both an alleged corrective disclosure and an alleged misrepresentation) for which the time of publication was unavailable, I assumed the alleged corrective disclosure (and alleged misrepresentation) occurred using the time Ms. Nettesheim assumed.

[2] Halliburton's returns are removed from the S&P 500 Energy Index using Halliburton's weight in the index at the start of each month. Index weights obtained from Bloomberg, L.P.

[3] The Fortune E&C index is an equal-weighted index of companies classified by Fortune as being in the E&C industry. Fortune 1000 classification as of April 17, 2000. The companies included in this index are those for which price information is available during the class period: Beazer Homes USA, Centex, Champion Enterprises, Clayton Homes, Comfort Systems USA, D.R. Horton, Emcor Group, Foster Wheeler, Granite Construction, Jacobs Engineering Grp., Lennar, MDC Holdings, NVR, Oakwood Homes, Pulte, Ryland Group, Standard Pacific, Stone & Webster, Toll Brothers, U.S. Home, URS, and IT Group. Fluor was excluded because of a spin-off during the class period.

[4] Calculated as the difference between Halliburton's return and Halliburton's predicted return using the regression detailed in Exhibit 2a.

[5] Calculated as the daily excess return divided by the standard error of the regression over the regression period. See Exhibit 2a.

[6] Data from Exhibit 17 of the Nettesheim Report dated September 17, 2007.

[7] Statistically significant at the 5% level.

[8] Unless otherwise noted, reactions adjusted for 35 multiple comparisons, based on the number of dates tested given by the Fund's alleged misrepresentation and alleged corrective disclosure dates.

[9] Corrected for 633 multiple comparisons.

[10] According to the Complaint, the 1999 annual report was issued in "early 4/00" (Complaint, ¶122). The 1999 Annual Report is not dated but it is my understanding it was filed along with Halliburton’s 1999 Form 10-K with the SEC on March 14, 2000.

Exhibit 1a

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

			Daily Returns (in logs)							Statistically Significant?[7]	
		Alleged Misrep,						Nettesheim Report[6]			
Event Date[1]	Test Date	Disclosure, or Other Date	Halliburton	S&P 500 Energy Index[2]	Fortune E&C Index[3]	Excess Return[4]	t-stat[5]	z-score	Significant?	Before MC Adjustment	After MC Adjustment[8]

[11] According to the Complaint, the 2000 Annual Report was issued “[i]n early 4/01” (Complaint, ¶158). The analyses in this report have been conducted under two assumptions regarding when the 2000 Annual Report first became public: first, assuming it became public on March 27, 2001, when Halliburton’s 2000 Form 10-K was filed with the SEC; second, as an alternative, assuming it became public on March 20, 2001, the date on the 2000 Annual Report. I have reported the results using the first date but my conclusions do not change if the second date is used.

Exhibit 1b

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Description	Allegation Category[2]	Nettesheim Report[3] z-score	Nettesheim Report[3] Significant?	Statistically Significant?[4] Before MC Adjustment	Statistically Significant?[4] After MC Adjustment[5]
5/14/99	5/17/99	O1	Halliburton's first quarter 1999 10-Q.	-	-	-	No	No
7/22/99	7/23/99	M1	Halliburton reported 2Q99 results and held earnings call.	All	(0.59)	No	No	No
8/13/99	8/16/99	M2	Halliburton filed its 2Q99 10-Q.	All	0.40	No	No	No
9/13/99	9/14/99	M3	Halliburton presented at Dain Rauscher Wessels conference.	All	0.92	No	No	No
10/4/99	10/5/99	D1	Halliburton announced sale of Dresser joint ventures and lower than expected 3Q99 earnings.	Merger / Unapproved	(4.94)	Yes	Yes	Yes
10/21/99	10/22/99	M4	Halliburton reported 3Q99 results and held earnings call.	All	0.05	No	No	No
11/15/99	11/16/99	M5	Halliburton filed its 3Q99 10-Q.	All	(1.25)	No	No	No
1/5/00	1/5/00	D2	Merrill Lynch and Brown Brothers Harriman reduced their earnings per share estimates.	Merger / Unapproved	(2.48)	Yes	Yes	No[6]
1/27/00	1/28/00	M6	Halliburton reported 4Q99 results and held earnings call.	All	(1.00)	No	No	No
3/14/00 [7]	3/15/00	M7	Halliburton issued its 1999 Annual Report.	All	1.00	No	No	No
4/26/00	4/27/00	M8	Halliburton reported 1Q00 results and held earnings call.	All	0.77	No	No	No
5/15/00	5/16/00	M9	Halliburton filed its 1Q00 10-Q.	All	0.85	No	No	No

Exhibit 1b

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

					Nettesheim Report[3]		Statistically Significant?[4]	
Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Description	Allegation Category[2]	z-score	Significant?	Before MC Adjustment	After MC Adjustment[5]
7/26/00	7/27/00	M10	Halliburton reported 2Q00 results and held earnings call.	All	0.54	No	No	No
8/10/00	8/11/00	M11	Halliburton filed its 2Q00 10-Q.	All	(0.84)	No	No	No
10/24/00	10/25/00	D3	Halliburton announced it planned to restructure its Engineering & Construction ("E&C") segment by combining its E&C businesses into one entity.	Merger / Unapproved	(3.60)	Yes	Yes	Yes
11/9/00	11/10/00	M12	Halliburton filed its 3Q00 10-Q.	All	0.43	No	No	No
12/21/00	12/21/00	D4	Halliburton announced a general negative near-term outlook, E&C restructuring, and a total $120 million (after-tax) charge related to the E&C restructuring and project losses.	Merger / Unapproved	(1.47)	No	No	No
12/22/00	12/22/00	D5	Alleged continuation of 12/21/00 alleged corrective disclosure.	Merger / Unapproved	(2.26)	Yes	Yes	No
1/30/01	1/31/01	M13	Halliburton reported 4Q00 results and held earnings call.	Asbestos	0.71	No	No	No
1/30/01	1/31/01	D6	Halliburton announced $193 million (pre-tax) charge related to E&C restructuring and project losses.	Merger/ Unapproved	0.71	No	No	No
3/27/01 [8]	3/28/01	M14	Halliburton issued its 2000 Annual Report.	Asbestos	0.42	No	No	No
4/25/01	4/26/01	M15	Halliburton reported 1Q01 results and held earnings call.	Asbestos	2.26	Yes	Yes	No
5/11/01	5/14/01	M16	Halliburton filed its 1Q01 10-Q.	Asbestos	1.39	No	No	No

Exhibit 1b

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Description	Allegation Category[2]	Nettesheim Report[3] z-score	Nettesheim Report[3] Significant?	Statistically Significant?[4] Before MC Adjustment	Statistically Significant?[4] After MC Adjustment[5]
5/25/01	5/25/01	M17	Robinson-Humphrey issued report after discussion with management.	Asbestos	0.41	No	No	No
6/28/01	6/29/01	M18	Halliburton announced Harbison-Walker claims could increase the Company's reported asbestos liability by $60 million.	Asbestos	(2.64)	Yes	Yes	No
6/28/01	6/29/01	D7	Halliburton disclosed that Harbison Walker had asked for financial and asbestos claims management assistance.	Asbestos	(2.64)	Yes	Yes	No
7/25/01	7/26/01	M19	Halliburton reported 2Q01 results and held earnings call.	Asbestos	1.98	Yes	No	No
8/9/01	8/9/01	M20	Halliburton filed its 2Q01 10-Q.	Asbestos	(3.03)	Yes	Yes	No
8/9/01	8/9/01	D8	Halliburton's 2Q01 10-Q stated that the Company's accrued net liability for known open asbestos claims was $124 million.	Asbestos	(3.03)	Yes	Yes	No
8/22/01	8/22/01	M21	Salomon Smith Barney, after discussions with Halliburton management, issued a report on Halliburton's asbestos exposure.	Asbestos	(1.13)	No	No	No
9/4/01	9/5/01	M22	*Platt's* report on asbestos liability.	Asbestos	0.76	No	No	No
9/20/01	9/20/01	O2	Beaumont Enterprise story on Texas verdict.	-	(1.84)	No	No	No
9/21/01	9/21/01	O3	Mealey's article on Texas verdict.	-	0.93	No	Yes	No
10/4/01	10/4/01	M23	Halliburton management discussed Halliburton's asbestos liability situation at a Deutsche Banc seminar.	Asbestos	0.42	No	No	No

Exhibit 1b

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Description	Allegation Category[2]	Nettesheim Report[3] z-score	Nettesheim Report[3] Significant?	Statistically Significant?[4] Before MC Adjustment	Statistically Significant?[4] After MC Adjustment[5]
10/23/01	10/24/01	M24	Halliburton reported 3Q01 results and held earnings call.	Asbestos	0.93	No	No	No
10/29/01	10/29/01	O4	3M announcement mentions Dresser as co-defendant.	-	0.16	No	No	No
10/30/01	10/31/01	D9	Halliburton announced Mississippi verdict.	Asbestos	(2.82)	Yes	Yes	No
11/1/01	11/1/01	D10	Alleged continuation of 10/30/01 alleged corrective disclosure.	Asbestos	(2.12)	Yes	Yes	No
11/8/01	11/9/01	M25	Halliburton filed its 3Q01 10-Q.	Asbestos	(2.07)	Yes	No	No
12/4/01	12/4/01	D11	Halliburton announced Texas judgments.	Asbestos	(2.20)	Yes	No	No
12/5/01	12/5/01	D12	Alleged continuation of 12/4/01 alleged corrective disclosure.	Asbestos	(2.27)	Yes	No	No
12/7/01	12/7/01	D13	Halliburton announced Maryland verdict.	Asbestos	(24.81)	Yes	Yes	Yes
12/10/01	12/10/01	O5	Halliburton stock price rebound after 12/7/2001 alleged disclosure.	-	-	-	Yes	Yes
5/22/02	5/22/02	O6	New York Times article about accounting policy.	-	-	-	No	No
5/28/02	5/29/02	O7	Halliburton announces SEC investigation.	-	-	-	No	No

Notes and Sources:

Data from FactSet Research Systems, Inc. and Bloomberg, L.P.

[1] Certain alleged misrepresentations and alleged corrective disclosures were made in analyst reports, SEC filings, presentations or annual reports, for which the time of publication was unavailable. For alleged misrepresentations, I assumed that analyst reports and presentations were made before or during market hours, and that SEC filings and annual reports occurred after market hours. Even under the alternative assumptions, my conclusions do not change. For alleged corrective disclosures (and for days containing both an alleged corrective disclosure and an alleged misrepresentation) for which the time of publication was unavailable, I assumed the alleged corrective disclosure (and alleged misrepresentation)

Exhibit 1b

Statistical Significance of the Price Reactions Following the Alleged Misrepresentations, Alleged Corrective Disclosures and Other Key Events

Event Date[1]	Test Date	Alleged Misrep, Disclosure, or Other Date	Description	Allegation Category[2]	Nettesheim Report[3] z-score	Nettesheim Report[3] Significant?	Statistically Significant?[4] Before MC Adjustment	Statistically Significant?[4] After MC Adjustment[5]

occurred using the time Ms. Nettesheim assumed.

[2] The Complaint discusses alleged misrepresentations in groups, and each group is followed by a list of reasons detailing why the group of alleged misrepresentations is false and misleading. The reasons fall into three categories of allegations: “Merger,” “Unapproved [Claims],” or “Asbestos.” The individual misrepresentations in each group are categorized based on the list of reasons following the respective group, which may contain reasons falling into one, some or all of the allegation categories. Following the last alleged corrective disclosure related to “Merger” and “Unapproved [Claims],” all subsequent alleged misstatements were categorized as “Asbestos.”

[3] Data from Exhibit 17 of the Nettesheim Report dated September 17, 2007.

[4] Statistically significant at the 5% level.

[5] Unless otherwise noted, reactions adjusted for 35 multiple comparisons, based on the number of dates tested given by the Fund's alleged misrepresentation and alleged corrective disclosure dates.

[6] Corrected for 633 multiple comparisons.

[7] According to the Complaint, the 1999 annual report was issued in "early 4/00" (Complaint, ¶122). The 1999 Annual Report is not dated but it is my understanding it was filed along with Halliburton’s 1999 Form 10-K with the SEC on March 14, 2000.

[8] According to the Complaint, the 2000 Annual Report was issued “[i]n early 4/01” (Complaint, ¶158). The analyses in this report have been conducted under two assumptions regarding when the 2000 Annual Report first became public: first, assuming it became public on March 27, 2001, when Halliburton’s 2000 Form 10-K was filed with the SEC; second, as an alternative, assuming it became public on March 20, 2001, the date on the 2000 Annual Report. I have reported the results using the first date but my conclusions do not change if the second date is used.

Exhibit 2a
Regression of Halliburton's Returns on the Returns of the S&P Energy Index and the Fortune E&C Index

Regression Statistics	
Multiple R	0.70
R Square	0.49
Adjusted R Square	0.49
Standard Error	0.02
Observations	598

	Coefficients	*Standard Error*	*t Stat*
Intercept	0.00	0.00	-0.09
S&P Energy Index[1]	1.38	0.06	23.30
Fortune E&C Index[2]	0.16	0.06	2.78

Notes and Sources:

Data from Bloomberg, L.P. and FactSet Research Systems, Inc.

Regression run on log returns from June 3, 1999 to December 6, 2001, excluding the days of the alleged misrepresentations and alleged corrective disclosures.

[1] Halliburton's returns are removed from the S&P 500 Energy Index using Halliburton's weight in the index at the start of each month. Index weights obtained from Bloomberg, L.P.

[2] The Fortune E&C index is an equal-weighted index of companies classified by Fortune as being in the E&C industry. Fortune 1000 classification as of April 17, 2000.
The companies included in this index are those for which price information is available during the class period: Beazer Homes USA, Centex, Champion Enterprises, Clayton Homes, Comfort Systems USA, D.R. Horton, Emcor Group, Foster Wheeler, Granite Construction, Jacobs Engineering Grp., Lennar, MDC Holdings, NVR, Oakwood Homes, Pulte, Ryland Group, Standard Pacific, Stone & Webster, Toll Brothers, U.S. Home, URS, and IT Group.
Fluor was excluded because of a spin-off during the class period.

Exhibit 2b
Regression of Halliburton's Returns on the Returns of the S&P Energy Index, the Fortune E&C Index, and an Asbestos Index

Regression Period: Class Period

Regression Statistics	
Multiple R	0.70
R Square	0.49
Adjusted R Square	0.49
Standard Error	0.02
Observations	598

	Coefficients	*Standard Error*	*t Stat*
Intercept	0.00	0.00	-0.11
S&P Energy Index[1]	1.38	0.06	22.48
Fortune E&C Index[2]	0.17	0.07	2.45
Asbestos Index[3]	-0.02	0.08	-0.23

Regression Period: One Year After the Class Period

Regression Statistics	
Multiple R	0.66
R Square	0.43
Adjusted R Square	0.42
Standard Error	0.03
Observations	250

	Coefficients	*Standard Error*	*t Stat*
Intercept	0.00	0.00	0.84
S&P Energy Index[1]	0.75	0.15	4.94
Fortune E&C Index[2]	-0.06	0.09	-0.61
Asbestos Index[3]	0.92	0.16	5.80

Notes and Sources:

Data from Bloomberg, L.P. and FactSet Research Systems, Inc.

Regressions run on log returns excluding the days of the alleged misrepresentations and alleged corrective disclosures. December 10, 2001 is also excluded.

[1] Halliburton's returns are removed from the S&P 500 Energy Index using Halliburton's weight in the index at the start of each month. Index weights obtained from Bloomberg, L.P.

[2] The Fortune E&C index is an equal-weighted index of companies classified by Fortune as being in the E&C industry. Fortune 1000 classification as of April 17, 2000.

[3] Asbestos index comprised of companies whose asbestos exposure was discussed by analysts. Specificially, we searched "asbestos" in the title of analyst reports covering companies in 2001 and 2002. Using the list of analyst reports created by this search, we identified the companies about which the reports were issued, focusing on U.S. companies. We excluded companies that did not have stock prices throughout the whole class period and companies that went bankrupt during the class period. This search resulted in the following companies: 3M, Allstate Corporation, American Financial Group, Ashland Inc. (Ashland Oil), Chubb Corporation, CNA Financial Corp., Cooper Industries, Inc., Corning, Inc., Crane Co., Crown Holdings Inc., Dow Chemical Co., Duke Energy, DuPont, Eastman Chemical, Fortune Brands Inc., Georgia-Pacific Group, Goodrich Corp., Goodyear Tire & Rubber, Hartford Financial Services Group Inc., Honeywell International Inc., International Paper Co., McDermott International, Nationwide Financial Services, Owens-Illinois Inc., Pfizer, PPG Industries, Inc., Sealed Air Corp., Travelers Property Casualty Corp., USG Corp., Viacom, Inc., and W.R. Grace & Co. An equal weighted index was constructed using the stock prices of these companies.

APPENDIX B: MATERIALS CONSIDERED

19. "Honeywell Lowers Forecast, Plans to Cut Jobs," MediaCorp News, 9/20/2001
20. "Halliburton Battered As Asbestos Verdict Stirs Deep Anxieties," New York Times, 12/8/2001
21. "Honeywell Says Asbestos Verdict Was More Than It Had Disclosed," New York Times, 4/18/2002
22. "3M Moves to Subdue Fears Over Asbestos Lawsuits Involving Masks, Respirators," Pioneer Press, 1/19/2002
23. "Dow Chemical Share Price Slides on Asbestos Concerns," Platts Commodity News, 1/10/2002
24. "Dow Stock Keeps Sliding as Asbestos Questions go Unanswered," Platts Commodity News, 1/14/2002
25. "Potential Liability Found in UCC Asbestos Case," Platts Commodity News, 10/24/2002
26. "Honeywell International Inc. Lowers Q3, Full Year Earnings Guidance; Plans More Job Cuts," Reuters Significant Developments, 9/19/2001
27. "Anxious Investors Sell Stock in Asbestos Defendants," Reuters News, 12/10/2001
28. "Asbestos Worries Snare Wider Range of U.S. Firms," Reuters News, 12/13/2001
29. "Dow Stock Battered by Asbestos Concerns," Reuters News, 1/14/2002
30. "Halliburton Buried As Investors Stop Believing," *TheStreet.com*, 12/7/2001
31. "Dow Chemical Is Tight Lipped About Asbestos," Wall Street Journal, 2/11/2002
32. "Jury Verdict of $30 Million on Asbestos Leads to Surge in Implied Volatility of Halliburton," Wall Street Journal, 12/10/2001

Press Releases

1. Halliburton 01/22/1998 press release
2. Halliburton 02/26/1998 press release
3. Halliburton 04/22/1998 press release
4. Halliburton 07/22/1998 press release
5. Halliburton 09/29/1998 press release
6. Halliburton 10/29/1998 press release
7. Halliburton 12/28/1998 press release
8. Halliburton 01/25/1999 press release
9. Halliburton 04/26/1999 press release
10. Halliburton 07/22/1999 press release
11. Halliburton 10/04/1999 press release
12. Halliburton 10/21/1999 press release
13. Halliburton 01/27/2000 press release
14. Halliburton 04/26/2000 press release
15. Halliburton 07/05/2000 press release
16. Halliburton 07/26/2000 press release
17. Halliburton 10/24/2000 press release
18. Halliburton 12/21/2000 press release
19. Halliburton 01/30/2001 press release
20. Halliburton 03/22/2001 press release
21. Halliburton 04/17/2001 press release

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22. Halliburton 04/25/2001 press release
23. Halliburton 06/28/2001 press release
24. Halliburton 07/25/2001 press release
25. Halliburton 07/25/2001 press release
26. Halliburton 10/23/2001 press release
27. Halliburton 10/30/2001 press release
28. Halliburton 12/07/2001 press release
29. Halliburton 12/11/2001 press release
30. Halliburton 12/14/2001 press release
31. Halliburton 01/04/2002 press release
32. Halliburton 01/23/2002 press release
33. Halliburton 01/23/2002 press release
34. Halliburton 01/30/2002 press release
35. Halliburton 02/13/2002 press release
36. Halliburton 02/22/2002 press release
37. Halliburton 03/14/2002 press release
38. Halliburton 03/19/2002 press release
39. Halliburton 05/20/2002 press release
40. Halliburton 05/22/2002 press release
41. Halliburton 05/28/2002 press release
42. Halliburton 05/30/2002 press release
43. Halliburton 06/04/2002 press release
44. Halliburton 07/16/2002 press release
45. Halliburton 07/22/2002 press release
46. Halliburton 07/24/2002 press release
47. Halliburton 08/13/2002 press release
48. Halliburton 12/11/2002 press release
49. Halliburton 12/18/2002 press release
50. Halliburton 12/18/2002 press release
51. Halliburton 12/18/2002 press release
52. Halliburton 12/20/2002 press release
53. Halliburton 06/29/2004 press release
54. Halliburton 08/03/2004 press release
55. Halliburton 10/13/2004 press release
56. Halliburton 12/22/2004 press release
57. Halliburton 01/03/2005 press release
58. Halliburton 01/25/2005 press release
59. Halliburton 02/28/2005 press release
60. Halliburton 04/05/2007 press release
61. Halliburton 02/11/2009 press release
62. Halliburton 09/28/2011 press release

SEC Filings of Other Companies

1. 3M SEC form 10-Q filed 11/13/2001
2. 3M SEC form 10-K filed 03/11/2002

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3. ABB SEC form 20FR12B filed 04/03/2001
4. Albany International SEC form 10-Q filed 11/13/2001
5. Albany International SEC form 10-Q filed 08/14/2002
6. Allegheny Energy SEC form 10-Q filed 08/14/2001
7. Allegheny Energy SEC form 10-K filed 03/11/2004
8. Crown Cork & Seal SEC form 10-Q filed 11/14/2001
9. Dow Chemical 2001 form 10-K, filed 03/20/2002
10. General Cable SEC form 10-K filed 03/30/2003
11. General Cable SEC form S-3/A filed 02/20/2004
12. Georgia Pacific SEC form 10-Q filed 11/5/2001
13. Georgia Pacific SEC form 10-K filed 03/22/2002
14. Quaker Chemical SEC form 10-K filed 03/29/2001
15. Quaker Chemical SEC form 10-K filed 03/28/2003

Academic Literature

1. Alexander, Janet C., "The Value of Bad News in Securities Class Actions," *UCLA Law Review*, Vol. 41 (1994)
2. Austin, Peter C. et al. "Testing Multiple Statistical Hypotheses Resulted in Spurious Associations: a Study of Astrological Signs and Health," *Journal of Clinical Epidemiology* 59 (2006)
3. Bowman, Robert G., "Understanding and Conducting Event Studies," *Journal of Business Finance & Accounting*, Volume 10, Issue 4 (1983)
4. Dunbar, Frederick and Tabak, David, "Materiality and Magnitude: Event Studies in the Courtroom," *Litigation Services Handbook: The Role of the Financial Expert*, edited by Roman L. Weil, Michael J. Wagner and Peter B. Frank (John Wiley & Sons, Inc., 2001)
5. Fischel, Daniel R., "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," *The Business Lawyer*, Vol. 38 (November 1982)
6. Fisher, Franklin M., "Multiple Regression in Legal Proceedings," 80 *Columbia Law Review* 702 (1980)
7. Hong, Hai, Kaplan, Robert S. and Mandelker, Gershon, "Pooling vs. Purchase: The Effects of Accounting for Mergers on Stock Prices," *The Accounting Review*, Vol. III, No.1 (January 1978)
8. MacKinlay, Craig A., "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol.XXXV (March 1997)
9. James M. Patell and Mark A. Wofson, "The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements," *Journal of Financial Economics* 13 (1984)
10. Reamer, Jay, Comiskey, Eugene E. and Groves, Roger E.V., "A Test of Market Response to a Tax-Accounting Change," *Journal of Business Research*, Vol. 3, No. 3 (July 1975)
11. Seife, Charles, "The Mind-Reading Salmon", *Scientific American*, August 2011, Vol. 305 Issue 2

APPENDIX B: MATERIALS CONSIDERED

12. Stevenson, Francis L., "New Evidence on LIFO Adoptions: The Effect of More Precise Event Dates," *Journal of Accounting Research*, Vol. 25, No. 2 Autumn, (1987)
13. Sunder, S., "Stock Price and Risk Related Accounting Changes in Inventory Valuation," *Accounting Review* 50 (April 1973)
14. David Tabak, "Multiple Comparisons and the Known or Potential Error Rate," *Journal of Forensic Economics* 19(2), 2006

Textbooks

1. Hervé Abdi, "Bonferroni Test," *Encyclopedia of Measurement and Statistics*, edited by Neil J. Salkind (Sage, 2007)
2. Bradford Cornell, *Corporate Valuation* (New York: McGraw-Hill, 1993)
3. William H. Greene, *Econometrics Analysis* (Pearson PLC, 7th ed., 2012)
4. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance* (McGraw-Hill: New York, 7th ed., 2003)
5. Richard A. Brealey, Stewart Myers, and Franklin Allen, *Principles of Corporate Finance* (McGraw-Hill: New York, 11th Ed., 2014)
6. Damodaran, Aswath, *Investment Valuation* (John Wiley & Sons, Inc., 2nd ed., 2002)
7. Kaye, David H. and David A. Freedman, "Reference Guide on Statistics," *Reference Manual on Scientific Evidence* (Federal Judicial Center, 3rd Ed., 2011)
8. Frank K. Reilly and Keith C. Brown, *Investment Analysis and Portfolio Management* (Thomson: Boston, 6th Ed., 2000)
9. John A. Rice, *Mathematical Statistics and Data Analysis,* (Brooks/Cole, 3rd ed., 2007)

Trade Publications

1. "Mealey's Litigation Report: Asbestos," Mealey's, May 2002
2. "Consolidated Trial of 5 Meso Victims Produces $17.5 Million Verdict By New York Jury," Mealey's, 01/19/2001
3. "Texas Jury Awards 5 Plaintiffs $130 Million Against NARCO, Dresser Industries For Exposure," Mealey's, 09/21/2001
4. "Miss. Jury Returns $150M Against AC&S, Dresser Industries, 3M Corp," Mealey's, 11/9/2001
5. "Baltimore Jury Awards 5 Plaintiffs $40 Million; $30 Million Against Halliburton," Mealey's, 12/21/2001
6. "Asbestos Litigation," RAND Institute for Civil Justice, 2005
7. "Asbestos Litigation in the US," RAND Institute for Civil Justice, 2001
8. "Asbestos Litigation Costs and Compensation," RAND Institute for Civil Justice, 2002

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF TEXAS

DALLAS DIVISION

- x

THE ERICA P. JOHN FUND, INC., On Behalf of Itself and All Others Similarly Situated,

Plaintiff,

Civil Action No.:

-against- 3:02-CV-1152-M

HALLIBURTON COMPANY and DAVID J. LESAR,

Defendants.

- x

Videotaped oral deposition of LUCY ALLEN, taken pursuant to notice, was held at the law offices of BOIES SCHILLER & FLEXNER LLP, 575 Lexington Avenue, New York, New York, commencing September 22, 2014, 9:09 a.m., on the above date, before Leslie Fagin, a Court Reporter and Notary Public in the State of New York.

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ALSO PRESENT:

CHAD COFFMAN, Global Economics Group

JAMES CHRISTE, Videographer

THE VIDEOGRAPHER: We are now on the record and recording.
This begins disk No. 1 in the deposition of Lucy Allen in the matter of the Erica P. Fund, Inc., et al., versus Halliburton Company and David Lesar in U.S. District Court for the Northern District of Texas, Dallas Division.
Today is September 22, 2014. The time is 9:09 a.m.
This deposition is being taken at 575 Lexington Avenue in New York at the request of Carl Goldfarb.
The videographer is James Christe. The court reporter is Leslie Fagin.
Will counsel state their appearance and who they represent.
MR. GOLDFARB: Carl Goldfarb from Boies Schiller on behalf of the plaintiff.
MR. NELSON: David Nelson, Boies Schiller on behalf of plaintiff.
MS. MILLER: Kim Miller, Kahn Swick

& Foti, also for plaintiff.
MR. GOLDFARB: Also with us is Chad Coffman from Global Economics Group.
MR. STERLING: David Sterling, Baker Botts, for the defendants.
L U C Y A L L E N, called as a witness, having been duly sworn by a Notary Public, was examined and testified as follows:
EXAMINATION BY
MR. GOLDFARB:
Q. Good morning, Ms. Allen.
A. Good morning.
Q. About how many times have you been deposed before?
A. I don't know. My report lists my testimony in the last four years, I believe so, and it's been more times than that, so prior to four years, I've also been deposed.
Q. I'm just going to go over some ground rules, although I'm sure you are familiar with them.
If I ask a question and your counsel doesn't instruct you to not answer,

you are required to answer if you understand the question.
Do you realize that?
A. Yes.
Q. Is there anything that would keep you from testifying truthfully and accurately today, any medication you are on or anything like that?
A. No.
Q. If I ask a question and you don't understand it, you can tell me that.
If you answer a question, I'm going to assume you understand it, is that fair?
A. Yes.
Q. If you need to take a break for some reason, if you let me know, I'm not going to take a break instantly, but I will try to take a break after a line of questions, so please let me know if you need to use the facilities or whatnot.
A. Okay.
Q. About how many expert reports have you done in Federal securities cases, do you know?

L. Allen

A. I do not know the answer to that.

Q. How many times have you represented plaintiff in a Federal securities case?

MR. STERLING: By represented, you mean appeared as an expert witness on behalf of?

MR. GOLDFARB: I do.

A. Where I've had testimony, is that your question?

Q. The question is not limited.

How many times have you been retained by plaintiffs in a Federal securities case?

A. I don't know. I could look in my -- at my recent last four years, I could look through that.

Q. As you sit here, can you think of a case in the last four years where you've represented the plaintiffs, where you have been retained on behalf of the plaintiff in a Federal securities case?

A. I can think of a case that was a securities case where I was retained by the plaintiffs. I don't know if it was Federal

L. Allen

or -- I just don't recall.

Q. What was the name of that case?

A. I do not recall the name of the case.

Q. Can you recall any other case which you were retained on behalf of the plaintiff in a securities case, whether Federal or State?

A. Not that I can recall.

Q. In preparing your report and for this question, I want to exclude counsel for Halliburton, outside counsel for Halliburton, did you talk to anybody at Halliburton, either current or former employee of Halliburton?

A. No, I don't believe so.

Q. Have you ever had your testimony excluded by a judge?

A. I don't believe so.

Q. Have you ever had your testimony criticized in an opinion by a judge?

A. I don't believe so, no.

Q. Have you had your opinions rejected by a court?

L. Allen

A. I don't believe I've had them specifically rejected. There may have been something that I had said or put into a report that wasn't necessarily adopted, but I don't recall anything being rejected.

Q. In the Flow Serve case, do you remember whether or not you opined the knowledge of alleged corrective disclosures were, indeed, corrective disclosures?

MR. STERLING: Which case?

MR. GOLDFARB: Flow Serve.

A. I don't recall whether I -- I don't recall.

Q. Do you recall -- what did you do to prepare for your deposition today?

A. I reviewed my report. I reviewed my prior reports in this matter. I reviewed a bunch of documents, so I looked over a bunch of documents I had considered in preparing my report.

Q. Did you look at any documents that you did not consider in preparing your report?

MR. STERLING: In preparation for

L. Allen

her deposition?

MR. GOLDFARB: Yes.

A. Not that come to mind. I might have, though, nothing that specifically comes to mind, no.

Q. Anything that comes to mind, period, whether specifically or generally?

A. No. I meant, I don't recall anything, but it wouldn't surprise me if I did.

Q. Did you talk to counsel for Halliburton in preparation for your deposition today?

A. Yes.

Q. Whom did you speak with?

A. I spoke with David Sterling, Jessica Pullum and Tom O'Brien.

Q. In person by phone or both?

A. Yes.

Q. Yes, meaning, both in person and on the phone?

A. Yes.

Q. When did those communications occur?

L. Allen

A. When have I spoken with them in person or on the phone?

Q. In preparation for the deposition, yes.

A. Had a conversation yesterday with some of them, not with David Sterling, but with Jessica and Tom O'Brien and I had a meeting with them last week, Thursday, I believe.

Q. In-person meeting?

A. In-person meeting, yes.

Q. With the three of them?

A. Yes.

Q. Do you have -- have you reached any opinions in this case that are not set forth in your latest expert report or your earlier two expert reports submitted in this case?

A. My findings in this matter are summarized in my report, so I've meant to include all of my findings in this matter in my report.

Q. Are you aware of any -- are you using findings as different than opinions?

A. I would say what I've done in my

L. Allen

report are, they're not opinions, they are findings based on my analysis.

Q. A court might call them your opinions, but you want to call them your findings?

A. I think that's correct, yes.

Q. Have you reached any findings that are not set forth in your three expert reports submitted in this case?

A. I have intended to summarize all of my findings in my report.

Q. Ma'am, that's not the question what you've intended, so, please, the question is, do you have, as you sit here -- have you reached any findings that are not set forth in your three expert reports?

A. I cannot think of anything that I have not summarized or put forward in my report.

Q. I actually said reports.

A. In my -- correct.

Q. Do you stand by the findings that are set forth in your three expert reports?

A. I do.

L. Allen

I would note that my assignment seven years ago was different than my assignment from my report this year and there is additional information that's considered in my recent report and there may be some differences between the reports.

Q. But with that caveat, you stand by the findings in all three of your reports?

A. Yes.

Q. Now, sometimes experts at NERA have a second reader, if that's the right terminology, of a report before it's submitted.

Did you have somebody from NERA serve as a reader for this case in this latest report?

A. Yes, and what we typically call it is a peer review and I had two peer reviewers at NERA read this report.

Q. Who are they?

A. Dave Tabak and Denise Martin.

Q. Is it customary to have two reviewers?

A. It's more customary to have one

L. Allen

peer reviewer.

Q. Did you make any changes -- first of all -- did you make any changes to the report in response to comments from either of those two peer reviewers?

A. I believe I did. I believe both of them had some stylistic wording suggestions in terms of clarity.

Q. Anything that would be beyond a stylistic or wording suggestions?

A. I don't think they had substantive suggestions or comments. They were helpful comments in terms of clarity.

Q. And as best you remember, is it accurate to say they did not have substantive comments on your report?

A. That's correct.

Q. Now, what is --

A. I don't want to say that their stylistic or clarity changes weren't substantive and helpful, but they didn't change the conclusions, the findings in the report.

Q. Now, you are saying something

L. Allen
different. I didn't ask you if they changed the conclusions, I asked if they had substantive comments, so there a line between stylistic comments and substantive comments.
Did they make any substantive suggestions?
A. They didn't make any suggestions that changed the findings or conclusions in my report. They made what I thought were helpful suggestions in terms of clarity.
Q. Can you please listen to the questions and can you please answer the questions. It's really, you are not answering the question I asked you.
MR. STERLING: Objection.
Q. Can you please answer the question I asked you, please. I will rephrase the question.
Is it accurate to say that as best you can remember, they did not make any substantive comments on the report?
A. The comments that they made, as I recall, regarded clarity and stylistic and they were helpful. They did not make

L. Allen
comments regarding -- that changed my findings or conclusions, so, in that sense, they were not substantive.
Q. I will go on because I don't want to waste a lot of time on this.
I will note you are not answering the question and if this keeps up, Ms. Allen, we will have a very long day.
I did not ask you -- you didn't respond to the question. You really need to respond to the question.
What are you claiming is your area of expertise?
A. Can you clarify that question for me. Do you mean what areas of expertise do I bring forward in terms of this report?
Q. I don't think the question needs clarification.
As a general matter, what do you claim is your area of expertise? I will ask you that and then I will follow-up and ask about this report, so what do you believe is your area or areas of expertise?
A. The areas that I work in at NERA

L. Allen
are securities and finance and mass torts and product liability.
Q. Do you claim expertise in any area, other than economics?
A. I have a background in -- so I have done a lot of work in securities and finance and mass torts and product liability, in forecasting claims, for example. I have a lot of coursework and experience in accounting and statistics and analytic and quantitative methods.
Q. That's not my -- my question wasn't your background. It wasn't your coursework. Please answer my questions.
Do you claim --
MR. STERLING: She was answering your question.
MR. GOLDFARB: She did not. The question was what she claims her area of expertise --
Q. The question is, do you claim expertise in any area, other than economics? And it's a yes or no and you can elaborate and you can say other areas, if there are

L. Allen
other areas. I'm not asking you to list your background or your coursework, so please answer the question. I will repeat it.
Do you claim expertise in any area, other than economics?
A. I believe when you first asked me about economics, I asked for clarification on what the question meant and you refused to give me clarification. I have answered the question to the best of my ability and my understanding of the question.
Q. What, if any, area, other than economics, do you claim to have expertise in? Not your coursework, not your background. What, if any, area, other than economics, do you claim to have an expertise in?
A. What do you mean by claim to have an expertise in?
Q. What, if any, area, other than economics, do you believe you have an expertise in?
A. I have in prior testimony and expert work applied my background in accounting and finance and quantitative

L. Allen

methods and statistics and economics and securities and finance in general and analysis of stock price movements and forecasting of claims, including asbestos claims, so those are areas in which I have previously testified as an expert.

Q. For purposes of this report, are you offering any substantive opinions about asbestos liability?

A. My expert report in this case deals with plaintiff or the funds claims that Halliburton, during the class period, has misrepresented its asbestos liability, so, yes, I am dealing with that issue.

Q. Are you offering any opinions in this case as to whether or not Halliburton's asbestos reserves were sufficient?

A. I have not been asked for this case to do an analysis of whether Halliburton's asbestos reserves were sufficient.

I have analyzed the claim of plaintiffs in the fund in this matter about the misrepresentations regarding the asbestos liability.

L. Allen

Q. So is it fair to say that if you haven't been asked in this case to do an analysis of whether Halliburton's asbestos reserves were sufficient, you have not offered any opinions on that topic?

A. No.

Q. No, you have not offered any opinions on that topic?

A. Could you read back the original question. I think I answered it as asked.

Q. Is it fair to say you haven't -- because you haven't been asked in this case to do an analysis of whether Halliburton's asbestos reserves were sufficient, is it accurate to say that you have not offered any opinions as to whether or not Halliburton's asbestos reserves are accurate?

MR. STERLING: When you say, you have not offered opinions, you mean in this case?

MR. GOLDFARB: Yes, I do mean in this case.

A. That's not the question as it was asked, as I understood it.

L. Allen

In this case, I have not offered those opinions. I have, in other matters, reviewed Halliburton's asbestos liability.

Q. I'm going to ask you about those other matters in a second, but so the record is clear, that in this case, you have not offered any opinion as to whether or not Halliburton's asbestos reserves are accurate?

A. I believe that's correct. I'm not sure what it means for a reserve to be accurate.

MR. STERLING: He said correct is his word.

THE WITNESS: He said accurate.

MS. MILLER: He said accurate.

A. I'm not sure what it means for an asbestos reserve to be accurate.

Q. Is it fair to say you haven't offered any opinions in this case as to whether asbestos reserves were adequate or sufficient?

A. Not whether the reserves themselves were, but about what the market and investors and what was affecting the stock price, so

L. Allen

it's correct, as you have asked the question, I have not been asked in this case to analyze whether the reserves themselves were adequate.

Q. So now I would like to ask you about the other matter or matters in which you have offered opinions as to the sufficiency or adequacy of Halliburton's asbestos reserves.

Was that one matter or several matters?

A. I have analyzed Halliburton's asbestos claims in more than one case.

Q. Have you issued a report in any of those cases?

A. I have issued reports and findings. I haven't issued -- filed an expert report with a court in any of those cases.

Q. Have you submitted an expert report to the opposing party in any of those cases?

A. I've submitted analysis, it's not in the form of a legal expert report as a court document.

Q. Were those cases between

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L. Allen
Halliburton and its insurance companies?
A. I've worked on matters between Halliburton and its insurance companies in which I prepared documents that summarized findings of mine, yes.
Q. Can you describe the cases in which you analyzed Halliburton's asbestos claims, as you put it?
A. So I've worked for matters involving -- where I've analyzed Halliburton's asbestos claims and I have worked for various insurers in a couple of different cases. They're different projects from a NERA prospective.
Q. Were these cases where the insurance company was considering buying out Halliburton's coverage or were the cases about something else?
A. They involved a settlement, those cases involved a settlement of the coverage.
Q. Did they all involve the settlement of the coverage?
A. I have some testimony here in my report.

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L. Allen
Q. What page are you looking at?
A. It's not numbered. If you look at my CV that's in my report.
Q. Which case are you referring to?
A. Lexington Insurance versus Clearwater Insurance Company.
Q. Can I see that copy for one second, just to see that I'm on the same page you are.
Which side?
A. It's on the last page, the right side.
Q. What was that case about?
A. It involved Halliburton's asbestos claims. I don't recall specifically what exactly the issue was.
Q. When you looked at asbestos data for Halliburton and asbestos reserves, did any of that include analyzing the sufficiency of the asbestos reserves prior to December of 2001?
A. So I wasn't particularly looking at the reserves. I was looking at -- one of the things I was doing was reviewing forecasting

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their asbestos claims and their asbestos liability, as well as applying it to the insurance coverage, so one of the things I did was review the Rabinowitz forecast of asbestos liability.
Q. You know, I take it that two Halliburton subsidiaries filed for bankruptcy in 2003, correct? I will represent that was the date, if you don't remember the date.
A. I don't remember the date.
Q. I will represent they filed in 2003.
My question is, at the time Halliburton said that that would take care of all its asbestos liability, so why would you be looking at asbestos liability seven, eight years later?
MR. STERLING: You are talking about the Clearwater case now?
MR. GOLDFARB: I'm talking about the Lexington Insurance versus Clearwater case.
Q. Actually, I'm talking in general, not just that case.

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Why would you be -- excluding any work in this case, why, in other matters, would you be -- why, in other matters, was there a dispute between Halliburton insurance companies five, six years after the bankruptcy filing related to asbestos issues?
MR. STERLING: Objection to form.
A. I don't recall why there was a dispute here. I was looking at Halliburton's asbestos claims starting in 2002, I believe, so I looked at it -- I looked at it for a number of years.
Q. What was it you were asked to do?
MR. STERLING: At which time, Carl?
Q. Generally, and the various cases where you were retained, what were you asked to do? If you were asked to do different things in different cases, please explain that.
A. One of the things I was asked to do was value Halliburton's pending and future asbestos claims. I was asked to review a forecast of pending and future claims that was done by Francine Rabinowitz. I was asked

L. Allen

to allocate claims against insurance coverage and valuing the insurance coverage of Halliburton under various alternatives. Those are some of the things I recall doing.

Q. What else do you recall doing?

A. I did work regarding Halliburton's asbestos for a number of years and I would say the work that I did sort of generally falls under what I just previously answered, but there were lots of individual modifications or sort of intricacies that happened.

Q. Were you retained in these various cases by insurance companies?

A. Yes, I believe -- everything I can think of regarding Halliburton asbestos, I think I was retained by insurance companies or reinsurance companies.

Q. And is it accurate to say that the data that you were examining was Halliburton's data in those cases?

A. Some of the data that I analyzed was Halliburton data.

Q. Were you provided confidential

L. Allen

information or data by the insurance companies about their businesses?

A. I believe I was.

Q. What type of data?

A. Claims data. I don't recall. There was possibly financial data.

Q. We might return to that topic later.

On a separate topic, did you make any determination regarding market efficiency in this case?

A. I wasn't asked to analyze market efficiency in this matter. I reviewed the analysis of plaintiffs and their experts.

Q. Ms. Allen, I'm not asking what you did review. I'm asking if you made any -- the question was, did you make any determination regarding market efficiency? So it's a yes or no and an explanation, if you would like.

A. I think I told what you I did. What I did is review the plaintiffs and their experts claims regarding market efficiency.

Q. So you didn't make any

L. Allen

determination yourself regarding market efficiency?

A. I didn't specifically do that, no.

Q. Does your analysis assume the market was efficient?

A. My analysis notes when there is evidence that contradicts plaintiff's claim of market efficiency, but I have tried to do an analysis assuming plaintiff's allegations are true and, for example, with this recent report, this year, what I have been asked to do is assuming plaintiff's allegations are true, analyze price impact of the alleged misrepresentations.

Q. What, if anything, were you asked to assume regarding market efficiency in this current report?

A. I have been asked, as I understand it, to assume that not only are the allege -- the plaintiff's allegations are true and assume plaintiff's allegations regarding market efficiency that their finding that the market is efficient, to assume that.

Q. So you assumed, for purposes of

L. Allen

your analysis, that the market was efficient, is that correct?

A. I think, as I said when you first asked me that question, as I noted, tried to note in my report, in my findings, when I find results that are inconsistent with plaintiff's claim.

Q. That wasn't my question.

My question is that you assumed for purposes of your analysis that the market was efficient, is that correct?

A. I've answered that question to the best of my ability. So sometimes the --

Q. You said --

MR. STERLING: Let her finish.

MR. GOLDFARB: She is --

MR. STERLING: You are trying to be careful and she is trying to be careful.

MR. GOLDFARB: That's fine. Please answer, Ms. Allen.

A. I have tried to analyze price impact, assuming plaintiff's claims are true, so assuming the misrepresentations and assuming their claim and finding that the

L. Allen

price of Halliburton's stock is efficient and I have noted in my report when there are inconsistencies, so, when, for example, if, as plaintiff's claim, the market were efficient, then you would not expect to see this result.

Q. You said you've been asked to assume plaintiff's allegations are true.

Does that mean you've assumed; one, that the misrepresentations were, indeed, misrepresentations, that the statements were false and; two, that those statements were made with scienter?

A. I have been asked and I have tried to assume that the plaintiff's claims are true and to the extent that those assumptions are contradictory, I tried to note that in my report, so sometimes --

Q. Ms. Allen --

MR. GOLDFARB: She is not answering.

MR. STERLING: She is trying to answer your question. You have to let her finish her answer.

L. Allen

MR. GOLDFARB: If her answer's responsive. What she is doing --

MR. STERLING: She is answering your question. You don't like how she is answering your question. She is answering your question. She is entitled to answer the question.

MR. GOLDFARB: She is entitled to answer the question, not to do a speech that's not responsive.

MR. STERLING: She is not making a speech. You are not entitled to cut her off.

Q. What does it mean for you to assume that plaintiff's allegations are correct?

A. I have tried to assume the allegations as alleged by plaintiff. My report notes that there are inconsistencies and the illogical claims that the plaintiffs have made, so to the extent that -- I cannot assume everything to be true at the same time because there are inconsistencies. I have tried to assume all of plaintiff's allegations are true, that they are alleged

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misrepresentations and I tried to assume, as plaintiff's claim the market is efficient, I have tried to note in my report when these assumptions when plaintiff's claims themselves are internally inconsistent and there are findings that contradict the claims.

Q. If the market for a stock is efficient, can the market consistently overreact to news?

A. A consistent overreaction to news is not consistent with market efficiency.

Q. I would like to ask you some questions about the market indices that you used in this case.

A. Sure.

Q. So you used one indicia to control for the energy service business, right, you used the S&P 500 energy index?

A. Yeah, I used one. I tried to use some alternatives, so the results are shown using the S&P.

Q. And then to control for Halliburton's energy and construction

L. Allen

business, you used the E&C index from Fortune rather than companies classified by as being in the E&C industry, right?

A. Correct, and as an alternative, I used a set of companies identified in a Merrill Lynch analyst report as being E&C industry.

Q. How did you decide those were the right indices to use?

A. Well, in my prior work, I had mentioned a few different alternative E&C industries and I reviewed all the -- and I think my prior reports explain how I obtained those indices and I examined each of those indices in this analysis and so I reviewed my prior work and looked at each of the E&C indices that I had mentioned and found in my prior work seven years ago in this case.

Q. In other cases, have you created a market index by looking at what companies' analysts have recognized as competitors of a given company?

A. Yes, I have done that.

Q. Why didn't you use that approach

L. Allen

here?

A. I think one of the things I'm doing is looking at what the Merrill Lynch noted as -- which is an analyst, other companies in the energy and construction business.

Q. But you looked at one particular analyst report and what companies it considered competitors and my question is, why didn't you look generally to see what companies' analysts considered Halliburton's competitors?

MR. STERLING: Beyond the Merrill Lynch one?

MR. GOLDFARB: Thank you. I don't need the clarification. The question is clear.

MR. STERLING: You are asking very ambiguous questions.

MR. GOLDFARB: Just object to form if you think that.

A. In my prior analysis, I did, I looked through analyst reports and other company and market commentary to see who -- what companies in the E&C industry, analyst

L. Allen

and others were comparing Halliburton to, so one of the ways I came up to that Merrill Lynch report is reviewing information looking for where analysts or others had developed a list of E&C companies.

Q. Why did you focus on the Merrill Lynch report and who was identified as competitors in that report as opposed to using the larger universe of analyst reports and the companies that are identified as competitors in those reports?

A. Now, you are going back a number of years. My recollection from seven years ago is having looked through analyst reports that were covered Halliburton, looking for a number of alternatives where an analyst or others has put together a list of companies in the E&C industries, so I did exactly that. I wanted to have an objective list and I looked for objective lists that someone else had put together for some other purpose, so that was exactly what I tried to do seven years ago and, this time, what I tried to do, since I previously have done that, let me

L. Allen

look at all the alternatives I put together the last time, the last time I was reviewing plaintiff's expert who had used what I found to be an inappropriate approach to come up with an index and so I tried to use some objective measures.

Q. Do you think that an objective measure is including all the companies that analysts recognize as competitors of a given company?

A. I think that could be an objective measure, sure. I'm not sure, I mean, I'm not exactly sure how you would institute that in this case, but, sure.

Q. I'm told that your backup material did not contain any data for the alternative indexes you considered.

Do you know whether you turned over that backup material to counsel to provide to us?

A. I don't know. I don't recall. I certainly would have meant to provide the backup data.

Q. And in instances -- just returning

L. Allen

to market efficiency for a second, you noted at points in your report, you noted evidence or findings that you thought were inconsistent with an assumption of market efficiency, correct?

A. I'm just saying about the backup data. I believe my prior reports had these indices, so I assume that data would have already been in a prior production, so I believe these indices were mentioned. They all came from my prior report, so those individual companies and all the information would have been in the whole prior turnover and fully disclosed in my previous reports.

Q. As to market efficiency, did you note in your report when you found or saw evidence that you thought was inconsistent with market efficiency, in this finding of market efficiency in this case?

A. Sorry. Could you repeat that.

Q. Regarding market efficiency, did you note in your report when you found or saw evidence that you thought was inconsistent with the finding of market efficiency in this

L. Allen
case?
A. I found after, as I mention in this report, as I also mentioned in my prior reports, that after December 7th, a large number of the analysts covering the company commented that they thought the price had overreacted and I discuss that in this report. I discuss that in my prior reports, that, in itself, as you previously asked, is certainly a consistent overreaction, an overreaction in general is, in itself, is not what you would expect in a market efficiency, so consistent overreaction, you wouldn't expect -- I don't recall if I specifically note here that that's not consistent with market efficiency. I think I did. I don't recall. I would imagine I did in my prior reports.
Q. Can you recall anything else that you think is inconsistent with market efficiency that you might not have noted in your report that you found in your analysis in this case?
A. I do recall noting --

L. Allen
Q. I'm not asking about what you noted.
I'm asking if there is anything else that is inconsistent with market efficiency that you don't believe you noted in your report? I know what you noted in your report.
A. I don't recall if I have mentioned in my report every instance, but there are a number of claims by plaintiff and their expert that are inconsistent with market efficiency. I'm not sure if I have mentioned all of them in my report.
Q. Just can you think of any that you have not mentioned in your report?
A. Many of plaintiff's allegations in this case -- plaintiffs allege a lot of dates of alleged misrepresentations, when, according to plaintiffs, the stock prices inflated when a new alleged misrepresentation enters the market. Much of this information that plaintiffs allege is inflating the stock price is either not new information -- is not new information, so I'm not sure if, at each

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point in time, I have mentioned that this alleged misrepresentation is, itself, not new information than other information that was already in the market or other information that the Halliburton has alleged to have misrepresented, so that's one point that is not consistent with the claim of market efficiency that I'm not sure I have noted in my report at each alleged misrepresentation, for example.
Q. Can you identify what I'm marking as Allen Exhibit No. 1?
(Allen Exhibit 1, Report, marked for identification.)
A. This looks like it's a copy of my report this year.
Q. Would you take a moment to confirm that, please?
A. Okay.
Q. Can you turn to page 12 of your report, please.
Have you made annotations on that report?
A. No, it's just easier to flip

L. Allen
through.
Q. As long as it's not annotated. On the bottom of page 12, it says, I found during the class period the asbestos index did not add further explanatory power to the model beyond that of the energy and E&C indices and, thus, did not include the asbestos index in the model.
Do you see that?
A. Yes.
Q. Does that mean that movement Halliburton stock during the class period was not correlated with the movement of the asbestos index?
A. You will see later in my report, I do mention that it is correlated with the asbestos index, just that once you include these other indices, it doesn't add further explanatory power, so you will see later in my report, I do mention that it is actually correlated, Halliburton's stock price is correlated with the asbestos index during the class period.
Q. I'm trying to remember, is it 37

L. Allen

percent correlation, was it a relatively low level of correlation -- I will withdraw the question and rephrase the question.

How closely correlated was Halliburton's stock price movements with the asbestos index during the class period?

A. I believe it's at a later part in my report, I have the statistics on the correlation during the class period and after the class period and mention the correlation goes up after the class period.

Q. I can find the precise number.

So your point is, can you just explain what you mean when you said, I found during the class period, the asbestos index did not add further explanatory power? What do you mean by?

A. In other words, running the regression, including the energy in the E&C index, explains some of Halliburton's stock price movement. Once you've included those two indices, in addition, adding the asbestos index doesn't add further explanatory power. If you don't have an energy index and E&C

L. Allen

index and only look at an asbestos index that does on its own have explanatory power.

Q. Footnote 21 on that page talks about some of the details of the companies in the asbestos index and it says you excluded companies that went bankrupt in the class period from the index, correct?

A. Correct.

Q. Why did you exclude those companies?

A. It was just Federal Mobile, I believe, that was excluded, so they went bankrupt during the class period and their stock price becomes very low, so I just didn't want to include an event such as a bankruptcy in the middle of an index, so I didn't want to have a stock price that had some other event going on that may make the stock price not -- may not -- may have some additional issues, in other words, there is an event that changed with Federal Mobile. It was not bankrupt in part of the class period and went bankrupt during the class period, so I thought it was wise to exclude

L. Allen

them.

Q. Was that the only company that you excluded because it went bankrupt during the class period?

A. Yes, I believe so.

Q. Did you check to see how, including that company in the index, affected the explanatory power of the index?

A. I don't believe so. Possibly. I don't recall doing that, no.

Q. If you look at Exhibit 2-B, if you look at footnote 3 to that exhibit, which is on page with the Bates label of 146.

A. Does it have a page number on the bottom?

Q. If you look --

MR. STERLING: Is yours different paginated --

THE WITNESS: Does it say on the bottom 3 of 5 or something like that?

MR. STERLING: Last page before her resume, right?

MR. GOLDFARB: That's correct.

A. Okay. Got it.

L. Allen

Q. It says that you identified companies from analyst reports that had asbestos in the title, reports from 2001 and 2002.

Did you provide a list of all the companies generated by that search?

A. We provided the search itself.

Q. You provided the results of the search itself?

A. Yes, the search itself, correct.

Q. So that should include all the companies identified by the search?

A. Correct, we provided that.

Q. You said you focused on U.S. companies.

Which companies were excluded because of that focus?

A. The foreign companies, the ones that were not U.S.

Q. Which companies is that?

A. I don't know -- I can't recite the companies.

Q. If you provided the list -- when you provided the list --

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L. Allen
A. The companies that are not listed in here.
Q. You provided the list with the foreign companies excluded, correct? You provided the results of the search after excluding the foreign companies?
A. No, we provided the search, including the foreign companies.
Q. Do you know which of the companies were the foreign ones that were excluded?
A. The ones that are not in here, the ones that we didn't, so if you look at the search, the companies that are -- that are -- come out of the search that are not -- that we didn't obtain price data for and are not included in here are the foreign companies.
Q. You also say you excluded companies without a stock price history over the whole period.
What, if any, company was excluded on that basis?
A. That you can see, because we gave you the stock price data, so you will see that it didn't cover the whole period.

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L. Allen
Q. So if there was stock price data for part of the period, would you have given that?
A. Yes.
Q. Now, you gave us stock price data company with a sticker BEAM.
Was that included because Fortune Brands became BEAM in 2001 and BEAM is a ticker used for Fortune Brands?
A. I believe BEAM is the ticker for Fortune Brands.
Q. Is MYV the MeadWestvaco Company?
A. I'm sorry?
Q. Is the ticker MYV the MeadWestvaco Company?
A. I don't recall the ticker.
Q. That company is not listed in your footnote as a company that you included in your index, nor is there any other company that seems to correlate to that ticker.
So why did you provide data for that company?
A. I believe we provided the companies that are used in the index are the ones that

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L. Allen
are listed here and we provided the stock prices for those companies. I believe we provided all the data that we used.
Q. If there is a discrepancy between the companies listed in the index and the companies for which you provided data, which is right, so if we have data that's for a company that is not in the index, how do we know -- I take it back.
If we have data for a company not listed in the footnote, how do we know whether or not that company was or wasn't included in your index?
A. I believe the footnote is correct. There is a footnote here and I believe there is a footnote in my report and I believe those are the companies -- that is correct, those are the companies that are included in the index.
Q. So if there is a discrepancy, the footnote would be what is correct?
A. I don't believe there is a discrepancy.
Q. I'm giving you an example. You

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L. Allen
provided data for a company with a ticker MWV.
What, if any, company does this correspond to in your footnote, and if it doesn't, why did you give us that data?
A. Do you want to show me the data? Does it have prices on every day during the class period? It may be a company that didn't have prices on every day and then that would explain it.
Q. That's a fair point. I can check.
MR. STERLING: Do you want me to help?
MR. GOLDFARB: Sure. If you know the answer.
MR. STERLING: I think they did an IPO during the class period.
MR. GOLDFARB: If that's right, Mr. Sterling, I'm not disputing that, but if that representation is right, how would that -- would that company have been included or not included?
A. If it didn't have stock price data during the class period, so it needed to have

L. Allen
stock price data during the entire class period, and you will see from the data that we gave you whether there is data during the class period or not, it's very straightforward. If there weren't prices there for the full class period, we didn't use it, and the companies that we used are the companies listed in the footnote.
Q. So Federated Mobile went bankrupt, so you gave us data, but because it went bankrupt, you didn't include it in your index, correct?
A. Correct.
Q. What about Advanced Auto Parts? It's not -- I believe we got data for that and it's not included in the index.
Do you know what the situation is for that company?
A. If we gave you data for it and it's not included in the index and it's with that list, then it's likely a company that didn't have complete data during the class period and may have had an IPO or some other event.
Q. Your index includes USG Corp., but

L. Allen
that company filed for bankruptcy in June of 2001, so why was it included?
A. I believe Federal Mobile is the only company that we excluded for bankruptcy, so USG, perhaps its stock price did not fall very low or -- I would have to check on that. I'm quite sure we didn't exclude USG.
Q. But according to your rules, if it went bankrupt, it should have been excluded, correct?
A. The only company I recall that we excluded is Federal Mobile and I believe it went bankrupt during the class period and its stock price went to a very low, like penny stock.
Q. But the rule you set forth in your report is that you excluded companies that went bankrupt during the class period.
Is that, indeed, the rule you applied in putting together your asbestos index?
MR. STERLING: Objection. Form.
A. We excluded Federal Mobile, we did not exclude USG.

L. Allen
Q. If it went bankrupt --
A. I don't know, as we sit here, if it did go bankrupt during the class period.
Q. If it did go bankrupt during the class period, it should have been excluded, according to the rule you set forth, right?
A. As it's described, I would say that's the case.
Q. Who decided which companies to exclude from the asbestos index?
A. I had, I believe, two researchers collect the data on the asbestos companies and the determination of which particular companies were U.S. versus not U.S., they made that, independently made that determination and agreed on that.
The exclusion of Federal Mobile, I believe, was brought to my attention or the suggestion of excluding Federal Mobile, I believe, was brought to my attention by one of my team and perhaps because the stock price was very low or perhaps because we were aware that there were news stories describing its bankruptcy, so I don't know whether there

L. Allen
was an independent attempt to determine whether any other companies went bankrupt, I'm just not sure about that. I don't have a recollection of that.
Q. Who made the decision to exclude Federal Mobile?
A. That was me, after having it been brought to my attention that Federal Mobile stock price was very low during this time period and there was discussion of its bankruptcy.
Q. Who else was on your team besides you?
A. I assume you are talking about my work this year or would you like to go back seven years?
Q. I'm talking about your expert -- who else assisted you in preparing the report that's before you as Exhibit 1?
A. So this year's report. My team included Jorge Baez, Renzo Comolli, Luke Depasquale, Andrew Nguyen, Ryan Tang, Eric Tarkin. That's the team I recall working on this, plus I had the two peer reviewers that

L. Allen

we previously mentioned.
Q. Do you know how many hours you personally spent on this report?
A. I don't know. That's something I could find out.
Q. Do you know, approximately?
A. My work in preparing this report, I would say a few hundred hours.
Q. And do you know how much work other members of your team collectively did?
A. I don't. That's something I could find out, though.
Q. I would like to talk about your analysis for multiple comparisons.
A. Sure. Can we just take a brief break?
Q. Sure.
THE VIDEOGRAPHER: It's 10:25 and we are off the record.
(Recess.)
THE VIDEOGRAPHER: It's now 10:45. We are back on the record and starting disk 2.
Q. So, Ms. Allen, I would like to talk

L. Allen

to you about multiple comparisons and corrections that you did in connection with that.
Now, have you ever, in any other of your reports, used a correction for a case where multiple comparisons are being made in a test of statistical significance is made for multiple dates?
A. I have done the multiple comparisons correction before.
Q. Have you done that using the Bonferroni test?
A. I don't believe so, I think I've used the Sidak before.
Q. How many times have you done such a correction?
A. I don't know.
Q. More than five?
A. Here, I've done the correction many times.
Is your question how many times have I done the correction?
Q. In how many different reports have you made such a correction?

L. Allen

A. That, I don't know. I know in my prior report in this matter, I mentioned the issue of multiple comparisons. I don't know if I -- I don't think I make a specific adjustment, I bring up the issue.
Q. In this case, you do an adjustment.
Can you think of other cases where you've done a statistical adjustment?
MR. STERLING: Of multiple comparisons?
MR. GOLDFARB: Yes.
A. Yes, I can think of other cases where I have done it.
Q. Can you think of -- it's more than one other case in which you've made a statistical adjustment for multiple comparisons?
A. It's an issue that I have been cognizant of and discussed multiple times. I just don't remember specifically whether I have done it, where exactly I've done it or when I have done it, so it's something that I have done a number of times at NERA, but I just couldn't list them in my head.

L. Allen

Q. When you say something you've done, what you mean by that is you've done a statistical correction in an expert report in other instances for multiple comparisons?
A. I recall doing it on projects. I don't recall specifically whether -- sometimes I've done an expert report, sometimes I have done a report that may be for mediation or I've done an analysis that I just don't recall whether it's in an expert report, done for mediation, done for what. I don't have a specific recollection of that.
Q. Are you aware of any expert not affiliated with NERA in doing this statistical correction for multiple comparisons in an expert report?
A. I do know that my colleagues at NERA have done it. I believe I have seen other court decisions or testimony about it, yes, but I couldn't, as I sit here, name it.
Q. The question is whether you've seen another expert not affiliated with NERA do a Bonferroni correction for multiple comparisons?

L. Allen

A. That wasn't your prior question.

Q. If it's a different question, it's a different question, but that's the question I would like to ask you.

A. I've seen testimony that court decisions that refer to multiple comparison adjustments. I don't recall if they're Bonferroni or Sidak. Those tend to be the two I have seen most commonly done and I may or may not have seen the underlying expert reports. I don't recall.

Q. Am I right that you recall doing a Sidak adjustment in another case where you submitted an expert report for multiple comparisons, but you do not recall doing a Bonferroni adjustment in another case for multiple comparisons?

A. I don't recall doing a Bonferroni adjustment previously. I recall doing Sidak adjustments, so one of my colleagues at NERA has written an article, an academic article on multiple comparisons and I believe mentions a Sidak adjustment and since the time of his article, I recall him saying that

L. Allen

he believes the Bonferroni adjustment may be -- although the adjustments are similar, he has recently been using a Bonferroni adjustment or believes a Bonferroni adjustment may be more appropriate.

Q. What's the name of your colleague?

A. Dave Tabak. So that was the reason, in this report, I have the Bonferroni adjustment. I've reported the results with the Bonferroni adjustment and as an alternative, did it with an Sidak adjustment rather than the alternative. It was based on some conversations with my colleague that he, in his more recent work, has tended to move to the Bonferroni adjustment.

Q. When, in your opinion, is it appropriate to do a statistical correction for multiple comparisons?

In case the question is not clear, is there a numerical threshold that, in your view, triggers it, so if there are three comparisons, it's not necessary, but if there is 15 comparisons, it is? When, in your opinion, is it appropriate to do a

L. Allen

statistical correction for multiple comparisons?

A. I think it's important to keep it in mind, so my colleagues at NERA have, for example, I know --

Q. I really want to ask about your opinion, not about what your colleagues and I don't want to interrupt, Ms. Allen, but I really want you to please focus on your opinion and when, in your opinion, it's appropriate to do a correction for multiple comparisons?

A. I was trying to answer that question.

I think it's important to keep the adjustment in mind and be careful that your conclusions are and findings are not sensitive to that. It is -- I think that if it's not critical to the issues in a case, it may not be something that -- it may be confusing to the factfinder to add in a bunch of additional statistical issues that may or may not be technically relevant. I do think it's an issue that one should consider and be

L. Allen

careful about in these sorts of instances, so to the extent that an analyst is making multiple tests, I think one should always keep in mind statistical issues and problems such as this multiple comparison problem.

Q. And I'm not asking you when an analysis should keep it in mind.

I'm asking you when, in your opinion, an analyst should actually run a statistical test correction for multiple comparisons, whether Bonferroni or the Sidak, is there a threshold number of comparisons that, in your opinion, makes such a test appropriate?

A. I think my prior answer stands. It's not that there is a threshold number of tests. I think it's important to keep in mind to what extent your findings and conclusions are robust and if it's an instance such as, in this case, where plaintiff's expert ran 633 tests, and then looked at statistical significance of those tests and then went back on the statically significant dates looking for information

L. Allen

that could potentially be or that she claimed could be related to the alleged misrepresentations, that was a big red flag that this kind of an issue is important. I think keeping that in mind, keeping those sorts of things in mind is important, in general.

Q. In your view, and I'm not asking you right now about this particular case, I'm asking you generally, about corrections for multiple comparisons, I understand you think it's always important to keep it in mind, which I appreciate, but I'm asking you when would you actually run the numerical analysis? Would you do that if there is just a half dozen dates being tested?

A. I can't answer with a specific threshold. I think it's important to understand the context.

Q. So you might do it even with a small number of dates being tested, if you thought it made a difference to the results in that case?

A. I wouldn't describe it that way. I

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think it's an issue that is important to keep in mind and to -- I couldn't say generally that there is some bright line threshold.

Q. Do you know when it comes to a securities action, sometimes people refer to price maintenance case.

Have you heard that term?

A. I believe I've heard that term. I'm not sure exactly what it refers to or it may or may not refer to different things in different contexts.

Q. You know as a theoretical matter, that a misrepresentation, if it effects the stock price, can do so by causing the stock price to rise at the time it was made or from keeping the stock price from falling, correct?

A. I think a misrepresentation, an affirmative misrepresentation is generally, the claim is that it inflated the stock price.

My understanding of an omission is that had the -- had an omission -- this is all other things equal, that if the omitted

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misinformation had actually been stated, that the stock price would then have fallen, so, in that sense, an omission keeps the stock price where it is allegedly, rather than allowing the stock price to fall as it allegedly would if the omission was -- if the omitted information was actually stated.

Q. So is it your opinion that a misrepresentation cannot effect the stock price by keeping it from falling?

A. I think the general claim is a misrepresentation inflates the stock price.

Q. My question is not the general claim.

My question is, is it your opinion that a misrepresentation cannot effect the stock price by keeping it from falling at the time the misrepresentation is made?

A. I think that might be characterized as an omission rather than a misrepresentation.

Q. Ms. Allen, I'm not asking about omissions. I'm really asking you about a misrepresentation and whether or not, in your

L. Allen

view, a misrepresentation can effect the stock price by keeping the stock price from falling at the time the misrepresentation is made?

A. I think that that could be described as an omission, rather than a misrepresentation.

Q. And other than describing a misrepresentation as an omission, do you think a misrepresentation can effect the stock price by keeping the stock from falling at the time the misrepresentation is made?

A. If you mean as a misrepresentation sort of a failure to say something, then, yes, I do think that's the case.

Q. I don't mean a failure to say something. I mean an affirmative misrepresentation.

Can an affirmative misrepresentation effect the stock price by keeping the stock price from falling at the time the misrepresentation is made?

A. I think that's -- I'm aware of people describing that as an omission.

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If you want to give me an example of how that is a misrepresentation rather than an omission, that's fine. I don't have any particular legal definition of the difference between a misrepresentation and an omission. I think they can be -- but my general understanding is that an omission is sort of a failure to say something negative and a misrepresentation is an affirmative statement of something positive, is often the case.

Q. So using your definition and distinction between a misrepresentation and an omission, is it your opinion that a misrepresentation cannot effect the stock price at the time the misrepresentation is made by keeping the stock price from falling?

And, please, it's a yes or no question and, by all means, explain your answer.

A. I think I have explained -- can you give me an example of a misrepresentation?

Q. I'm asking as a theoretical matter. It's a straightforward question.

L. Allen

Using your definition of a misrepresentation, can a misrepresentation effect the stock price when it's made by keeping the stock price from falling? Yes or no, and an explanation, if you would like to provide one.

A. I'm not sure what it means to keeping a stock price from falling. I think -- if you give me an example, perhaps I can answer it better, but I think that oftentimes, what I have heard is a misrepresentation -- sometimes I think misrepresentations and omissions are not clearly defined differently and those terms can be used interchangeably and sometimes I think they're used distinctly and differentiated.

It's my understanding, when they are differentiated, a misrepresentation is generally a statement that inflates the stock price and it's a positive statement. An omission is generally a failure to give negative information.

Q. So am I right that using your

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definition of a misrepresentation, you do not think a misrepresentation can effect the stock price at the time it was made by keeping the stock price from falling, an omission can do that, in your view, but not a misrepresentation, is that right?

A. I think that's a semantic difference, so there may be a misrepresentation that perhaps I would describe as a misrepresentation. I'm not sure. I think we would have to define some terms, so I think we have to say falling or rising relative to what.

Q. We've already --

A. So, for example, the market's expectation at some point was there was going to be some positive information announced and a company states that same positive information that the market, for whatever reason, was expecting, I think it could be a misrepresentation and the stock wouldn't actually fall, but I think that could be -- that could be an instance where you might describe it as a misrepresentation, so it

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could perhaps be positive information, I don't know what it would be positive -- it depends. There would be a lot of definition. Is it positive relative to what the market was thinking, is it positive relative to what the company had been saying.

Q. I understand that misrepresentations can also often be recharacterized as omissions. I will give you an example of a misrepresentation. If a company says, on day one, we expect in the next quarter to have earnings of $5 a share and on day 100, they say -- say, day 30, they say, we expect to have earnings of $5 a share next quarter and if it's a misrepresentation, the second statement, right, you could say it's an omission because they are omitting information they know that's contrary to that statement, but it's also a misrepresentation.

Can that misrepresentation we expect to have earnings next quarter of $5 a share effect the stock price by keeping it from falling?

A. I think you could also say it's

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inflating the stock price because, if not that, it would be something different, so I don't -- keeping it from falling relative to what, I guess is the question?

Q. Keeping it from falling relative to what the price would be, absent the misrepresentation?

A. That's always the case then, so the point of a misrepresentation or an omission, if it has an effect, is that the price is higher in one instance and lower in the other, so that doesn't make a distinction between them. There is a difference between the price with and without the misrepresentation or the omission.

Q. What, to you, is the difference between inflating the price and keeping it from falling? You are talking about a misrepresentation inflating the price. Does that mean that the price is actually going up at the date of the misrepresentation?

A. I think that's not clear, so I think my understanding is that for an omission or a misrepresentation to effect the

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stock price, it's that with or without the misrepresentation or omission, the stock price would otherwise have been different.

Q. So do you think a misrepresentation can effect the stock price because without the misrepresentation, the stock price would have gone down?

A. Gone down relative to where it is with the misrepresentation or gone down compared to where --

Q. Yes. Where it is with the misrepresentation.

A. Yes, I think that could be the case, with and without the misrepresentation, the stock price would be lower, without the misrepresentation, yes, I do think that could be the case.

Q. So then the misrepresentation is affecting the stock price, even though the stock price is not physically going up at the time of the misrepresentation?

A. I don't know if that's the case.

Q. So you said a moment ago that a misrepresentation could effect the stock

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price if it were the case that without the misrepresentation, the stock price would be lower, right?

A. Yes.

Q. So use that as, please, as a definition of a price maintenance case where the allegation is that absent the misrepresentation, the stock price would be lower, okay?

A. That's my understanding of every case with positive inflation, so that would be the same for every case, whether it's price maintenance or not, it's my understanding when plaintiff's claim that a misrepresentation or an omission inflated the stock price, it's that without this, the stock price would have been lower, so that, to me, is not a differentiating feature. My understanding --

Q. I understand your point, but there is some cases where, if you do an event study, the stock price rises at the time of the misrepresentation, correct?

A. There is sometimes, whether you do

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an event study or don't, the stock price rises, whether you do an event study or not does not effect the stock price.

Q. Let's talk about a company specific. Let's talk about company specific stock price movements.

You would agree that sometimes a misrepresentation causes a company specific increase in the stock price?

A. Yes.

Q. And that sometimes a misrepresentation, even though it doesn't cause a company specific increase in the stock price at the time of the misrepresentation, can later be determined to have affected the stock price if the stock price -- if there is a corrective disclosure and the stock price falls at the time of the corrective disclosure?

MR. STERLING: Objection. Form.

A. I think for a misrepresentation to effect the stock price, it must, in some sense, be causing the stock price to rise or be inflated, so the question is where would

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the stock price be without the misrepresentation and where would it be otherwise, and you need to show some sort of a difference and my understanding is that in order for a misrepresentation to effect the stock price, it has to actually make the stock price. Typically, the kinds of misrepresentations, the stock price would be higher than it would otherwise be, so it's causing a rise or inflation in the stock price.

Q. When you have a securities fraud case where the stock falls at the time of the corrective disclosure, right, what is the inference if the corrective disclosure is, indeed, termed to be a corrective disclosure and there, indeed, is a statically significant stock price drop at the time of the corrective disclosure, what is the inference that is drawn of the effect of misrepresentation on the stock price at the time the misrepresentation was made?

A. Oftentimes, there can be some evidence about the effect of information on

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the stock price by looking at when that corrective information is made to the market.

Q. What is the inference that's drawn in the example, type of example I gave you as to the effect of the misrepresentation on the stock price when the misrepresentation was made?

A. It can be evidence of the effect of that same information on the stock price at some other point in time, so you can take the effective information at some later point in time and use it as evidence or make some inference about how that same information would have affected the stock price earlier.

Q. Going back to the Bonferroni adjustment, does it, in your view, make sense to apply the Bonferroni adjustment to a situation where the plaintiff does not believe or claim that the misrepresentation causes a statistically significant increase in the stock price, just looking at the misrepresentation alone, at the time of the misrepresentation alone?

MR. STERLING: Objection. Form.

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Q. I will rephrase the question.

In this case Ms. Allen, do you realize that the plaintiff's allegations is there were a lot of misrepresentations it made, that those misrepresentations, if the truth had come out, the stock price would have gone down, but that the truth didn't come out until later and the stock price went down later. You realize that's essentially the thrust of plaintiff's allegations in this case?

A. I don't understand that, I'm sorry.

Q. Do you understand plaintiffs to be alleging that the stock rose at the time the misrepresentations were made?

A. It's my understanding that plaintiff's claim the stock price was inflated during the class period, when the company made allegedly misleading statements and that caused an inflation in the stock price. It's my understanding there are 25 different dates or so during the alleged class period when plaintiff's claim statements were made that inflated the stock

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price.

Q. But that wasn't my question.

My question was, is it your understanding that plaintiffs are alleging that the stock price grows at the time the misrepresentations were made? Yes, plaintiffs are claiming that the misrepresentations inflated the stock price, but is it your understanding that they're alleging that the misrepresentations caused the stock price to actually rise at the time the misrepresentations were made?

MR. STERLING: Objection. Form.

A. Yes, it's my understanding that plaintiffs were claiming that when the company made allegedly misleading statements, the stock price was higher than it would have been otherwise had the company not made these misleading statements.

Q. That's not my question, Ms. Allen. You keep answering a question that's not the one I asked.

Yes, we agree that that's plaintiff's allegation, but I'm asking a more

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specific question, so the specific question is, is it your understanding or do you not have an understanding that -- is it your understanding that plaintiffs are alleging that at the time of the misrepresentation, that the Halliburton stock price rose?

MR. STERLING: Objection. Form.

A. It's my understanding they are claiming the misrepresentations caused the stock price that on 25 separate days during the class period, the company made misleading statements that caused the stock price to rise above where it would have been had they not made those misleading statement.

Q. You've said that multiple times, but it's not the question.

In this case, you tested, sometimes using the Bonferroni formula, for 35 different dates, correct?

A. I made an adjustment for multiple comparisons using a Bonferroni adjustment. I also did it with a Sidak adjustment and the number of separate dates that plaintiff's claim the company made misleading statements

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that inflated the stock price and/or corrective statements in which the alleged inflation came out of the stock price is 35 different days, so one of the multiple comparison corrections that I did is a correction for 35 separate tests.

Q. And you report that plaintiffs allege 25 misrepresentations and 13 alleged corrective disclosures and three dates where both a corrective disclosure and misrepresentation, right?

A. That's correct.

Q. So that 22 dates were just misrepresentations, correct?

A. Yes, I believe that's correct.

Q. And 13 dates were just alleged corrective disclosures?

A. I think there are three that are both, so maybe it's 10 that are just.

Q. Okay. And 13 are -- and 10 are just corrective disclosures.

Did you run your Bonferroni test using the number that would correspond to just the alleged corrective disclosure dates,

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13?

A. No.

Q. So you don't know how, if at all, your results would be different if you ran a test for 13 separate comparisons as opposed to 35?

A. No, I don't.

Q. When you tested for 35 dates, is it accurate to say that to find the price movement was statistically significant, you had to find with a more than 99 percent confidence level that the movement was not caused by chance?

A. No, I don't think that would be correct to say, so -- no.

Q. Why is that not correct?

A. So when I'm making the Sidak or the Bonferroni adjustment, I'm still using the same 5 percent level. I'm just taking into account the fact that multiple tests have been made, so if you look at each test in isolation -- I'm not looking at each test in isolation, I'm taking into account the fact that many different tests have been made.

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Q. So when you test for 35 days to find the price movement on a particular day was statistically significant, is it accurate to say you had to find, with a more than 99 percent confidence level, that the movement on that particular day was not caused by chance?

A. So I'm not testing 35 days, right. What I'm saying is that the plaintiffs in this case have alleged 35 separate days on which the alleged -- on which alleged misrepresentations were made or alleged curative information came out and on top of that, plaintiff's expert has actually done a whole 633 days or tested all of the dates during the class period, so on top of that, there were another, a whole bunch of more tests made, so it's not me that came up with 35 or 633.

Q. But you did do a Bonferroni correction and you did do that sometimes using 35 days as a number of days for which a comparison was done, right?

A. I did -- one of the corrections

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that I made was using a -- yes, a 35 test date.

Q. And I want to focus on just the analysis you did using 35 test dates in the Bonferroni analysis you did for those dates.

And the question is, in your view, I understand that the plaintiff is alleging that the stock price movement was statistically significant, but for you to agree that the stock price movement was statistically significant after applying the Bonferroni correction when you were using the 35 days as a number of days for this multiple correction, is it accurate to say that for any particular day, for you to agree that the stock price movement on that day was statistically significant, there had to be a price movement that you could say with more than 99 percent confidence on that day was not caused by chance?

A. No, I don't think it would be an accurate statement.

Q. What level, after applying the Bonferroni correction, if you're testing for

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35 different dates, with what level of confidence would you have to find that the price movement was statistically significant for you to agree that the price movement was not caused by chance?

A. It's not whether I'm saying the price movement was caused by chance or not. The dates -- what I'm doing is testing a -- I have a hypothesis that whether the price movement on a given date can be statistically differentiated from zero or would you expect to see such a movement, and one of the things that I do is to say, instead of just taking each day in isolation, given the very large number of dates that plaintiffs are claiming in this case, as well as the approach that plaintiff's expert used to choose dates, you need to take into account that there are many different dates being tested and if you use a 5 percent level, one of the things you are doing is, say, one out of every 20 times, without anything happening, I would expect to see something that is within this 5 percent level and so all I'm doing is saying, let's

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just look at all the different dates that have been looked at and make an appropriate statistical adjustment for that.

Q. After you make the appropriate statistical adjustment, what would the analysis have to show for you to be able to say that the price movement on a particular day was not caused by chance?

A. That's what I'm -- that's not something that I'm doing, saying whether it was or wasn't caused by chance, so I'm just not making that.

Q. You've said that you didn't find a statistically significant price movement on these days, assorted days. We can look at your report, on various days where Ms. Nettesheim found a statistically significant price movement. You said after applying the Bonferroni adjustment, we found there was not a statistically significant price movement.

We can agree on that, correct?

A. Yes.

Q. When you are applying the Bonferroni adjustment and you're testing for

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35 different dates, at what confidence level do you have to say that the price movement was not caused by price for you to conclude that there is a statistically significant price movement?

A. That's the part I'm just not agreeing with the language there.

Q. You're not agreeing because you just said it wasn't statistically significant, right? Explain why you are disagreeing with my statement.

A. I just don't think your statement is an accurate reflection of what I'm saying. I have forgotten how you worded it, but I didn't think it was accurate.

Q. In one instance, as to December 7th, after applying the Bonferroni adjustment, you found there was a statistically significant price movement, did you not?

A. That's correct, after a multiple comparison adjustment, I find that the price reaction on December 7th is statistically significant, both before and after a multiple

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comparison adjustment.
Q. What was the level of confidence that you found was applicable after applying the Bonferroni adjustment to whether or not you could say that the December 7th price movement was or wasn't caused by chance?
A. I can't answer that question. I don't think that's a statistically correctly worded question. I don't know how to answer that question.
Q. You found there was a statistically significant price movement on December 7th after applying the adjustment, right?
A. Correct.
Q. What did your analysis applying the adjustment show in terms of the numbers that you found when you applied the Bonferroni correction? And can you tell us what page you are looking at or which exhibit?
A. I'm looking at Exhibit 1 to my report.
MR. STERLING: 1-A.
A. Exhibit 1-A.
MR. STERLING: Lucy's pages aren't

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marked, it's 138 on ours.
MR. GOLDFARB: Thank you. I found it.
A. I found that it was still statistically significant before and after making a multiple comparison adjustment of a stock price reaction on December 7th, but I don't actually have any specific, other than the result, I show a T-stat and I show what Nettesheim's model shows and I show the results.
Q. What T-stat was required to find a statistical significance after applying Bonferroni?
A. I don't know.
Q. Is it a high T-stat that is required than if you don't apply Bonferroni?
A. Yeah, that's a -- yes, generally speaking, that's correct.
Q. Does a --
A. For example, the T-stats can be negative and positive and it would be a greater absolute values, not actually higher and all the rest, so it's not -- but I don't

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know, as I sit here, what the T-stat is.
Q. But the absolute value of the T-stat has to be higher to find statistical significance if you are applying the Bonferroni correction as compared to not applying the Bonferroni correction, correct?
A. Yes, that's correct.
Q. And does an absolute, if the absolute value of the T-stat stick is higher, are you able to say with a higher level of confidence that the price movement -- I will rephrase.
If the absolute value of the T-stat is higher, does that allow you to have a higher level of confidence in rejecting the null hypothesis?
A. It's not how confident you are. It's -- that's just not a proper -- it's not my degree of confidence, whether it's inside or outside of a certain confidence level.
Q. It's whether you can say, as a matter of statistical analysis, not whether you, Ms. Allen, are more or less confident, but if the absolute value --

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A. It's not reflecting my confidence, so I am using the same confidence level and the same -- I'm using a 95 percent and a 5 percent and I'm doing that with and without a multiple comparison adjustment.
Q. If the absolute value of the T-statistic is higher, does the analysis allow one to conclude with more than a 9 -- with a greater degree of confidence that the null hypothesis is not applicable?
A. No, I mean, that's just not a correct statement from a statistical standpoint.
Q. What P value is required to find statistical significance on a particular day after applying the Bonferroni correction?
A. So it would depend what you mean by the P value. So one of the things I'm doing when I make the Bonferroni or the Sidak adjustment is I'm continuing to try to use a 5 percent or a 95 percent level, so it's given that you've made this many tests. Where would I be to still have this be outside of the 5 percent? Be extreme that

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this would in the 5 percent extreme value, so the 95 percent confidence interval you are saying that do I see a result that if the null were true, I would only expect to see 5 percent of the time and that's -- and I am using that same 5 percent, 95 percent level with Sidak or Bonferroni adjustment.

Q. And my question was, what P value is required to find statistical significance on a particular day after applying the Bonferroni correction? Isn't it just 5 percent divided by 35, if you are doing a multiple comparison, to adjust for 35 days being tested?

A. So I think if you look at the date in isolation, I think you can take the P value and make that adjustment, yes, I think that's correct.

Q. Are you familiar with the terms type 1 and type 2 errors, as used in a statistical analysis?

A. Yes, I am.

Q. Is it fair to say a type 1 error is a false positive?

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A. Yes, I believe that's correct.

Q. Is it fair to say, in layman's terms, that a type 2 error is a false negative?

A. Yes, I think you can say that.

Q. When multiple dates are tested, applying a Bonferroni correction helps prevent a type 1 error, does it not?

A. That is one of the things that it can do, so as I describe in my report, that if you do too many tests, you can find -- I think it was scientific American says you can find statistically significant results and if there is nothing underlying -- yes.

Q. A Bonferroni adjustment reduces the risk of finding a type 1 error, false positive at the risk of introducing a type 2 error or a false negative, doesn't it?

A. If you find something, if you test a bunch of dates and you find that there can be a tradeoff and it can have that effect, I think.

Q. If you're testing for 35 days to find out a particular price movement was

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statistically significant, at least with respect to a particular day, does the statistical test have to show a 99.86 percent confidence level that the price movement on that particular day was not caused by chance?

A. I don't think I would agree with that particular statement, no.

Q. What would you disagree with about -- what aspect of that statement do you disagree with?

A. Could you repeat it to me again.

Q. Sure. For 35 days, to find the price movement was statistically significant, at least with respect to a particular day, don't you need a T-statistic that corresponds to 99.86 percent confidence level that that price movement on that day was not caused by chance?

A. Can you read it to me again, sorry.

Q. For 35 days, to find the price movement was statistically significant, at least with respect to a particular day, don't you need to find a T-stat that corresponds to a 99.86 percent confidence level that the

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price movement on that day was not caused by chance?

A. I don't think that's exactly how I would word it, but I think that's approximately. I'm not disagreeing with the numbers. If you look at a day in isolation, then, so the -- I think that's -- you will have to read it to me again, sorry.

Q. If you're doing a Bonferroni correction for multiple days and you're trying to correct for 35 days, is it accurate to say that to find the price movement was statistically significant with respect to a particular day, that you have to find a T-statistic that corresponds to a 99.86 percent confidence level that the price movement on that day was not caused by chance?

A. So you have to -- if you ignore the fact that you are testing multiple other days, if you ignore the fact that many other days are being tested and tests just one day in isolation, ignoring the -- how the days were chosen or how many other days, then the

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actual threshold T-statistic that you are looking for on the one day you are testing, ignore the fact of the other days is a T-statistic that, on its own, ignoring all the other things, would be a T-statistic consistent with a confidence interval at such a threshold.

Q. And the threshold was the one that was in my question, 99.86 percent?

A. I think that's correct -- what did you say?

Q. 99.86 percent.

A. I think that's correct. That's with --

Q. The caveats you explained in your answer.

A. And I think that's with the Bonferroni adjustment.

Q. Isn't it true, another way of stating this, that if you are applying a Bonferroni correction for a particular date and correcting for 35 multiple comparisons, excluding the fact of how the dates were chosen and that you're testing for multiple

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dates, that the test for statistical significance includes the probability for a type 1 error to be 0.14 percent instead of 5 percent?

A. That's ignoring the fact of what you have actually done. If you ignore the fact that you've done multiple tests and you are testing multiple days, the whole point is, for example, you do 20 days and you're using a 5 percent threshold, you would expect one out of 20 days would be statistically significant, so if you ignore all that, then, yes, if you testing something in isolation.

Q. When you are performing a statistical analysis, as an economist, do you need to think of the proper balance between avoiding type 1 errors and type 2 errors?

A. Sure. I think it's something to keep -- take into account, yes.

Q. What, if anything, did you do in this case to evaluate the probability that your Bonferroni adjustment to avoid type 1 errors was increasing the probability of introducing type 2 errors?

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A. I did a lot of things to see whether -- one of the things, as I have done, is I have reported everything with a multiple comparison adjustment without a multiple comparison adjustment and all of my analysis makes clear, and we can go through my whole report, that the findings in my report do not hinge on the point of what exact statistical adjustment is made.

I think it's clear from my prior work that plaintiffs and their expert have allegations that are not consistent with the actual movement in Halliburton stock and that have cherry picked and chosen dates because of their -- and, typically, it's price drop because of finding price drops on particular dates, so I don't think my analysis is sensitive to what exact statistical adjustment I have made and I think you can understand my entire analysis and findings without doing any statistics and without understanding the Bonferroni adjustment or Sidak adjustment.

Q. Have you ever heard of the Holme

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Bonferroni adjustment method?

A. The Holme.

Q. Holme Bonferroni adjustment method?

A. Holme spelled with an L?

Q. Yes.

A. Yes.

Q. Yes, you have heard of it?

A. Yes, I have heard of it, but I'm trying to remember what I know about it.

Q. I have only asked for the moment whether you heard of it. I will ask a follow-up question.

A. The fact I have some, you know, recollection of how it's spelled is --

Q. Is some indication that it's something --

A. It's triggering something in my mind, but I'm not remembering it.

Q. Did you consider using that method here in this case?

A. I did not or I don't believe I did. I don't even have a specific recollection of what it is.

Q. As a matter of statistics, did you

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do any test to see whether or not using a Bonferroni adjustment to reduce the possibility of type 1 errors was increasing the possibility of type 2 errors?
A. I don't understand that question.
Q. Did you try to determine whether or not the Bonferroni adjustment was increasing the number of -- what, if anything, did you do to see whether or not your application of Bonferroni adjustment was leading to false negatives in this case?
A. So I did a lot of work in this case and I did a lot of work trying to see whether what I was asked to do and what I was asked to do, particularly this year, is to look at the price impact from the alleged misrepresentations and I don't think my findings hinge on the multiple comparison adjustment, so one of the things that I did is I did a multiple comparison adjustment using a couple of different statistical approaches, using the most commonly used statistical approaches, but I think I made clear -- I hope I have made clear in my

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report that my -- there are many other ways that you can see that my findings regarding price impact are not -- you can understand my findings with or without making that kind of adjustment, so that is something -- so I don't -- I tried very hard to make sure that it wasn't just because I was doing some statistical test that someone may or may not be that familiar with. I think that it's quite clear to even a layperson that if you have information, such as an alleged misrepresentation or alleged curative information or corrective information coming out and you test date after date, that at some point, at a 5 percent or 95 percent level, something will be statistically significant, not because the alleged misrepresentation or alleged corrective information is affecting the price, but because of the threshold that you're using.
Q. Now, I want to ask you about a different topic, corrective disclosures.
In your opinion, what is the methodology for determining whether or not a

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disclosure is, indeed, a corrective or curative disclosure?
A. One of the things I did was try to find what dates plaintiffs and their experts have --
Q. I'm sorry, I will ask you about the particular analysis you did here in a moment, but what I'm asking you now, as a general matter, in terms of your methodology, how do you go about determining, in general, not in just in this case, in particular, whether disclosure and alleged corrective disclosure is a corrective or curative disclosure?
A. I think it might help if I describe how I -- is your question given that I have a disclosure, how to determine whether it's corrective or how do I find --
Q. The former.
A. How I find when corrective information was actually released to the market?
Q. If there is information that there is a corrective disclosure, how do you, as an expert, determine whether or not you agree or

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disagree as to whether that alleged corrective disclosure is, indeed, a corrective disclosure?
A. One of the things I would do is to try to understand what was it is allegedly corrective of, so what is the alleged misrepresentation that this is allegedly correcting.
A second type of analysis I would do is what is the alleged corrective disclosure itself. Is it an announcement, is it a press release, how is allegedly corrective information introduced into the market and I would review that allegedly corrective information.
Oftentimes, it's helpful to review what was previously known or thought about that type of information and how did market participants such as analysts or others understand or view the allegedly corrective information that is introduced into the market, so those are some of the steps that I would often do in trying to determine whether corrective disclosure was corrective.

L. Allen

Q. Does the most corrective disclosure reveal that the prior misrepresentation was false?

MR. STERLING: Objection. Form.

MR. GOLDFARB: What is the basis for the objection?

MR. STERLING: Calls for a legal opinion.

Q. Your understanding, please.

A. I don't think it has to, no.

Q. Does a corrective disclosure have to -- does the market have to recognize that the prior misrepresentation was false for corrective disclosure to, indeed, be a corrective disclosure?

A. I don't think so, no.

Q. Does the market have to recognize that it had been previously -- strike that.

Does the market have to recognize at the time of a corrective disclosure that it had previously been misled by the company's misrepresentation for the corrective disclosure to be a corrective disclosure?

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MR. STERLING: Objection. Form.

A. I don't think it would necessarily have to, no.

Q. Do analysts have to recognize that the corrective disclosure -- do analysts have to recognize that the misrepresentation was wrong?

MR. STERLING: Objection. Form.

A. I don't think they have to, no.

Q. Do analysts have to recognize that the company had previously misled the market through the misrepresentation for corrective disclosure to be a corrective disclosure?

MR. STERLING: Objection to form. Sorry, thought you were finished.

A. Can you repeat that.

Q. Do the analysts have to recognize that the company had previously misled the market through the misrepresentation for the corrective disclosure to, indeed, be a corrective disclosure?

MR. STERLING: Objection. Form.

A. Is that different from your prior questions? I'm not sure I'm understanding

L. Allen

your prior ones. I'm not seeing a distinction between them.

Q. If you can please answer the question.

A. I'm asking for clarification, to the extent that's different than the prior questions, could you help me out and let me know how it's different?

Q. It's similar. I believe the difference, without examining all the prior questions, I believe the difference is, I asked previously about whether the market had to recognize it had been misled by the misrepresentation and, this time, I asked whether the analysts had to recognize they were misled by the misrepresentation, so it's similar, but it is not identical?

MR. STERLING: Same objection.

A. I thought I had -- I thought you had already asked me that question.

MR. STERLING: Just answer this one.

A. I don't think it has to be the case that analysts or the market have to

L. Allen

understand that they were misled.

Q. You said one of the things you look at in deciding whether or not something is a corrective disclosure is how the market and analysts reacted to the disclosure, correct?

A. I think it can be helpful to see how market -- the market, including analysts, react to a disclosure in understanding how a disclosure is -- whether a disclosure is corrective or not.

Q. How is that helpful?

A. How is it helpful?

Q. Yes.

A. For example, a statement, an alleged misrepresentation could be made by a company and they use words that are thought to have -- certain that are claimed by plaintiff to have certain meaning and claim to be interpreted by the market to have certain meaning and when the corrective statement is made, which might use different words, if nobody understands the meaning of those words any differently than the way the company had previously used the words, then

L. Allen
although it may give some indication of how -- it may give an indication of what was understood by the allegedly misrepresented statement as an example. I don't think I explained that very well.
MR. GOLDFARB: Can we go off the record for a minute, please.
THE VIDEOGRAPHER: It's 12:08 and we are off the record.
(Recess.)
THE VIDEOGRAPHER: It's 12:17. We're starting disk 3 and we are back on the record.
Q. Ms. Allen, a few more questions about corrective disclosures.
Do you agree whether an alleged cause of a stock price drop is direct enough to determine whether it is a corrective disclosure is often a question of the finder of fact in a securities case?
MR. STERLING: Objection. Form.
A. I believe everything is ultimately the finder of fact, is my understanding. What I'm doing is helping the finder of fact,

L. Allen
as an aid for the finder of fact, so I don't think anything is up to -- in a case, is up to me to decide.
Q. Did you review the complaint in this case for alleged omissions?
A. I don't think I did. I think it was my understanding that plaintiffs were alleging misrepresentations, rather than omissions, so I don't believe I did. I think I looked for alleged misrepresentations.
Q. So I take it then that you didn't look to see whether the alleged corrective disclosures corrected any alleged omissions?
MR. STERLING: Objection. Form.
MR. GOLDFARB: What's the basis for the objection?
MR. STERLING: It's unclear what you mean by alleged corrective disclosure. The one in the complaint, the one Ms. Nettesheim came up with?
MR. GOLDFARB: Both categories of corrective disclosures.
Thank you.
A. I did try to look for anything that

L. Allen
I found plaintiffs or their experts said about why a particular date was allegedly corrective, so I tried to thoroughly look through the complaint, plaintiff's expert reports, other pleadings, I think possibly the answers to interrogatories or other pleadings, I guess I would call them, that for both what plaintiffs were alleging, as well as what plaintiff's claim were corrective dates and specifically what was corrective about those dates.
Q. Again, not in terms of this case, but in terms of your general understanding and approach, how do you go about determining whether or not a corrective disclosure is corrective of an alleged omission?
A. Well, it's hard to say, in general, but if an omission -- if the claim the company omitted to say that XYZ, then I would look to see whether XYZ was actually revealed or disclosed at some point in time.
Q. I would like to turn to your analysis of the asbestos misrepresentations and corrective disclosures. Obviously, we

L. Allen
will not get through all of this before lunch.
Is your report based on your understanding that Halliburton's statements regarding its asbestos liability were limited to statements regarding its liability for pending claims only?
A. Is your question whether Halliburton's statements regarding its asbestos liability were limited to pending claims only?
Q. It's a slightly different.
My question is, is your report based on your understanding that Halliburton's statements regarding its asbestos liability were limited to statements regarding its liability for pending claims only?
A. No, it's my understanding that when they reported numbers regarding asbestos liability, those numbers dealt with pending claims. Certainly, the company announced not just information about current pending claims, but announced information about this

L. Allen

is how many cases have been settled or resolved, here are the dollars amount for cases that have been resolved during the quarter, so there is other information, some of which I detail in my report, that the company was announcing that wasn't just about their open or pending claims.

Q. But using -- drawing a distinction between liability for pending claims and liability for potential future claims, is your report based on your view that Halliburton only made statements about its liability for current claims and didn't make any statements about its exposure to potential future claims?

MR. STERLING: Objection. Form.

A. I wouldn't say that exactly. I would say that it's my understanding that what the company reports and estimates in terms of its liability is its estimates and it's numbers are for open or pending claims and it did not give forecast or estimate for future claims that would be filed in the future, but I think there are some statements

L. Allen

the company made that plaintiffs are alleging are -- I think the complaint and plaintiffs have made allegations about statements that are for information, other than just pending claims.

Q. If you look at paragraph 161 in your report.

A. Sure.

Q. Now, that paragraph says, Halliburton first disclosed estimates of asbestos liability for future claims more than eight months after the end of the class period in August of 2002. At that point, the company had sufficient information to make a reasonable estimate of future claims.

You see that, obviously, right?

A. Yes. Just to be clear, the quotes, that's not me saying they had sufficient information, that's a quote from what the company said.

Q. You're not opining as to whether or not that statement is correct, are you?

A. Correct, I'm not opining, I'm merely reporting that was the statement the

L. Allen

company made at the later point in time after the end of the class period.

Q. And you're not opining on the truthfulness or the accuracy of assertions Halliburton makes in its SEC filings, are you?

A. No.

Q. Now, if we look at paragraph 157 of your report, you see in the bottom part of that paragraph, you quote some language from Halliburton's 2000 10-K, correct?

A. Correct.

Q. That language says, and you're quoting the company's report, it says, quote, We recognize the uncertainties of litigation and the possibility that a series of adverse court rulings or new legislation affecting the claims settlement process could materially impact the expected resolution of asbestos-related claims.

You see that, right?

A. Yes.

Q. You know that Halliburton did not disclose the September 12th verdict against

L. Allen

it until December, though, you also point out in your report that there were some public reports about that September 12th verdict, including, I think on September 20th in a Beaumont paper in Texas, right?

A. The Texas verdict?

Q. Yes.

A. Yes.

Q. Did you check to see whether or not, at any point during the class period, Halliburton knew of other adverse verdicts against it in asbestos case that it did not disclose?

A. I did look at other verdicts that related to Halliburton or one of its subsidiaries, so I don't believe the company made -- I think I note one of the analysts saying the company didn't tend to disclose verdicts. One of the points the analysts made, which I think I quote in my report, is that given Halliburton's aggressive strategy, and they do a very good job of managing claims and the claim values are lower than other companies, that they don't report the

L. Allen

good outcomes and that when there is headline news, it's the bad outcomes that you see, so I note that, but one of the things I did look is to see whether -- one of the things I say is that the Texas and the Mississippi verdicts were large and large relative to prior verdicts for Halliburton and I did look at prior verdicts for Halliburton and Harbison Walker, so I not only note that is what analysts or news stories say at the time, so I looked at that and I'm trying to remember what I looked at that through. I did make an effort to look at what were prior verdicts that related to Halliburton to have some confidence that those verdicts were high relative to their prior experience.

Q. Let's look at the document reviewed section of your report. I guess it's documents considered, and to the best of your knowledge, is this a complete list of the documents you considered in putting together your expert report?

A. There were some analyst reports that were inadvertently left off this list

L. Allen

that I believe we sent you after that.

Q. Including the additional analyst reports that were sent to us through counsel at Baker Botts, is this list of materials considered, to the best of your knowledge, a complete and accurate list of the materials you considered in putting together your expert report?

A. Yes, I believe so.

Q. And I know you said you tried to determine whether or not Halliburton's -- whether or not the verdicts that you discussed in your report were, indeed, large in comparison to earlier verdicts, but are you aware of whether or not there are any adverse asbestos verdicts that were handed down during the class period and that were not publicly disclosed by Halliburton?

A. That related to Halliburton?

Q. Yes.

A. I think there were -- I don't remember if it was during the class period. I think there were verdicts during the class period that related to Halliburton or one of

L. Allen

its subsidiaries or Harbison Walker.

Q. That were not disclosed publicly.

A. By Halliburton?

Q. Correct.

A. I think so.

Q. What is your bases for thinking so?

A. I mean, for example, I think I quote an analyst report, an analyst report here that mentions seven verdicts or nine verdicts or something like that. I don't recall if I quote that analyst report, but I do recall analyst reports quoting a number, mentioning a number of verdicts, and I believe that this was mentioned in the December 2001 timeframe or possibly in January 2002 and they talked about more than just the Texas, Mississippi or Maryland verdicts, so I'm remembering a number like seven or nine maybe.

Q. There was -- I think it was in December, there was a call with analysts where Mr. Coleman, I think, reported some figures after the class period and said we took eight cases to trial and we won this

L. Allen

number and lost that number.

Is that maybe what you are thinking of?

A. I do recall something along those lines. I do think there were additional cases that happened. I don't know whether they happened during the class period or not. One of the things --

Q. I'm not sure what you're answering at this point because I'm not sure there is a question pending.

A. Okay.

Q. I just want to be clear what your testimony is and make sure I understand your testimony.

So did you do anything to see whether or not there were any adverse asbestos verdicts against Halliburton that Halliburton did not disclose in the class period and that there was not -- first leave it at that?

A. I didn't particularly look for it, to answer that question, so I reviewed hundreds of analyst reports, as well as -- in

L. Allen

the process of the material that I reviewed, I believe I saw evidence that there were prior verdicts against -- prior verdicts that relate to Halliburton or one of its other companies or subsidiaries.

Q. Did you check to see whether there are any adverse verdicts handed down during the class period that were not discussed in any of the analyst reports?

A. I did not make such a check, but I can tell you the things I did check that might give an answer to that question, but I wasn't particularly researching the question that you've asked, so I may have an answer to the question because of other reasons, but I wasn't particularly researching that question.

Q. I take it you cannot say with confidence whether or not there were any adverse asbestos verdicts handed down against Halliburton during the class period that; A, Halliburton did not disclose publicly and; B, were not the subject of any analyst reports?

A. Do you mean the subject of analyst

L. Allen

reports after the class period or during the class period?

Q. During the class period.

A. I didn't particularly look for that. What I did do, I looked at Mealey reports, Mealy reports verdicts. I did look at some point to see -- one of the statements I make in my report is that these verdicts were large relative to prior verdicts and prior -- I do recall trying to look at prior Halliburton verdicts. I'm just not remembering what kind of a source I would have looked for for that information and I do recall at least some analyst discussing historically prior verdicts that included numbers that were more than just the number that are discussed in the complaint and discussed in my report.

Q. You don't know whether that analyst report was one that was issued during the class period or after the class period?

A. I'm pretty sure it was after the class period because my recollection about the analyst report is that they were

L. Allen

discussing it in the context of after these December events.

Q. Looking again briefly at paragraph 157 and the language there, did you attempt to determine whether, at any point in the class period, Halliburton knew that a series of adverse court rulings were more than just a possibility?

A. Can you ask that question again.

Q. Sure. Did you attempt in any way to determine whether, at any point in the class period, Halliburton knew that a series of adverse court rulings against it on asbestos-related claims were more than just a mere possibility?

MR. STERLING: Objection. Form.

A. I reviewed all of the information that plaintiffs put forward in the complaint and other pleadings and their expert reports and other documents, what evidence they say was misrepresented and allegedly corrective, so to the extent it was put forward, all I would have tried to do is to understand what plaintiffs are alleging and reviewing the

L. Allen

documents that I have considered, so, other than that, I have not done any further research into that issue.

Q. You haven't looked at any of the documents that were produced in this case by Halliburton to plaintiffs, have you? Because I don't believe any of those documents are listed on your documents considered.

A. I reviewed all the documents the that were attached to the complaint, referenced by the complaint and referenced or attached to plaintiff's experts reports when plaintiff's expert was doing loss causation.

Q. You didn't review the documents that Halliburton produced to plaintiffs in this matter, unless they happened to be attached to the complaint or attached to Ms. Nettesheim's expert reports?

A. Or relied upon by plaintiff's experts in doing loss causation, correct.

Q. I would like you to turn to page 77 of your report.

A. Sure.

Q. You discuss there that the average

L. Allen

cost of the claim did not change substantially during the class period, this is a cost for Halliburton to settle or otherwise dispose of the asbestos claims against it and compared favorably to other companies.

Do you see that?

A. I see the section in my report and it generally says what you said. I don't think you just read it, but, sure, yeah.

Q. If you look at the next page, there is a chart at the top of the page that says, Halliburton's Historical Gross Costs Per Closed Claim and it goes from the fourth quarter of 1998 to the fourth quarter of 2001, right?

A. Yes.

Q. Now, does that chart include or exclude the adverse jury verdicts that were handed down in 2001 and that were on appeal?

A. It's closed claims, so it does not include cases that have not closed, so a case that was on appeal would not be included.

Q. And did you look to see how the

L. Allen

averages would change if you included the cases that were on appeal and assume that the verdicts or judgments wouldn't be reduced?

A. I didn't particularly do that. There are a number of analysts that report numbers like that.

Q. Do you know whether, during the class period, Halliburton disclosed the fact that its average costs for settling asbestos claims did not include the costs or judgments of cases that were on appeal?

A. I don't know if they specifically said that. It wouldn't have been my understanding that they would have been in there. So it's my understanding that they're closed or settled claims, so I do recall some analyst mentioning that they don't include that. I don't recall when they made that statement.

Q. If you look in the small print under the chart we are discussing on the top of page 78, you see that it says under notes and source that it does not include post '92 Harbison Walker claims.

L. Allen

Do you see that?

A. Correct.

Q. Why were post '92 Harbison Walker claims excluded?

A. These are not including the post '92 Harbison Walker claims, so this is to show that -- the Harbison Walker claims were settling at higher amounts than the Halliburton cases and what the analysts and other market commentators said was that Halliburton had an aggressive, an effective defense strategy and they didn't believe that Harbison Walker's defense strategy was as effective and the dollars were higher, so this is only -- this is for only the claims that are Halliburton, not including the ones that, at some point, are in the class period, Halliburton says that they may end up having some financial -- they may end up being financially responsible for.

Q. But you're not opining as to whether or not Halliburton was more effective in managing the claims against it than Harbison & Walker was, correct?

L. Allen

A. I am finding that there is very consistent commentary by analysts and others that they were more effective and I do see that the numbers are substantially better for -- that the average cost per claim is substantially lower for Halliburton than for the Harbison Walker claims.

Q. That wasn't my question.

My question is whether you're opining as to whether or not Halliburton was better able to manage asbestos claims against it than Harbison Walker was able to manage asbestos claims against it?

A. I am finding, and I do report that in my report, that there is consistent commentary and belief to that effect.

Q. Have you done anything to check whether or not that commentary is justified?

A. One of the things that I have done is look at the actual numbers in terms of the average cost per claim and I have seen that the numbers as reported and that are much lower for the Halliburton claims than for the Harbison Walker claims.

L. Allen

Q. Did you compare the claims to make a determination as to whether or not the claims were comparable?

MR. STERLING: Objection. Form.

A. Comparable in what way?

Q. Comparable in terms of the severity of the injuries, comparable in terms of the time when they were filed, comparable in terms of the damages demanded. There are a lot of reasons that one company could have a different average for claim settlement cost than another. Are you saying that? I'm asking whether you have done anything to determine whether or not the numbers are reflective of differences in the claims, differences in the way the claims are handled or why the numbers are different?

MR. STERLING: Objection. Form.

A. I have looked at a lot of the commentary. I am very familiar with how claims are valued and what are difference that might make claims different. There are a large number of claims being filed against Halliburton and Harbison Walker, and I have

L. Allen

reviewed lots of commentary about the differences in terms of how the claims are managed, the types of claims, the percentages that are -- I think one of your other questions is when the claims were filed, so I think for the Halliburton claims, I have some -- there is some public information of the filings quarter by quarter and for the Harbison Walker claims, I think I only have that information partway through the class period.

Q. What claim does Harbison Walker -- what was the cutoff to determine whether Harbison Walker versus Dresser was responsible for a claim that was filed against Harbison Walker -- you know Harbison Walker was once part of Dresser, correct?

A. Correct.

Q. You know Harbison Walker was spun off from Dresser, correct?

A. Correct.

Q. Which claims is Harbison Walker responsible for, which claims is Dresser and Halliburton responsible for?

L. Allen

A. Well, I think that's a disputed issue. I don't have any legal opinion of who should or should not be responsible. My understanding at the time of the -- that the post '92 claims were -- my understanding is there is some agreement that the post '92 claims would be -- would not be Halliburton's responsibility, would be Harbison Walker's responsibility.

Is that your question?

Q. Yes. That was the question.

I know you said you read a lot of analyst reports and I know you said you looked at the numbers.

What have you done, if anything, in terms of independent research investigation to determine whether or not Halliburton was better able to resolve its asbestos claims for less money than Harbison Walker?

A. Well, one of the things I see is that the numbers themselves are actually substantially lower, so the claim resolution and settlement values are lower.

I haven't particularly researched

L. Allen

that issue, but in my research for this case, I have seen lots of evidence that suggest that Halliburton has been more effective in managing its asbestos claims than had been Harbison Walker or Harbison Walker's parent, Global, I guess was the name.

Q. Now, you say in paragraph 181 that the adverse asbestos verdicts contain no new information, is that right?

A. Regarding the alleged misrepresentations, I said. I don't think I said the verdict itself isn't new information.

Q. The first sentence in paragraph 181, However, these announcements contain no new information regarding the company's alleged misrepresentations, including any alleged misrepresentations of other companies' expected insurance recovery for asbestos claims.

Do you see that?

A. Yes.

Q. In your view, do these adverse jury verdicts contain any new information

L. Allen

concerning Halliburton's average cost to settle pending cases?

A. To the extent they contain new information, so to the extent that they were corrective, then the -- plaintiffs would claim they were corrective, than the earlier verdicts when they are publicly announced, would be equally or more corrective than a later verdict, so that's one -- you're reading from -- it's a section here that's kind of a bit of a summary and then I go through the points in more detail, so I think one of the points that I make is to the extent that plaintiff's claim, I believe it's the Mississippi verdict, is stunning confirmation, that the prior statements were false, to the extent that was true and they claim there is something in there, then when this verdict comes out and there is no price reaction and nobody cares, then that corrective part of that has no price impact.

Q. Ms. Allen, I would appreciate it if you would answer my question, which is a little more focused. I'm not asking about

L. Allen

what else you said in other parts of your report, which I have, indeed, read multiple times.

I have a specific question, which is, in your view, do those adverse jury verdicts contain any new information concerning Halliburton's average cost to settle pending claims? It's a yes or no and an explanation, if you would like to append one.

A. I don't know if it's new information that's material to the market. I think that a verdict itself can be new information and it can have an effect on the expected value of future settlements.

Q. So would you agree that the verdicts do contain new information concerning Halliburton's average cost to settle pending claims?

A. That's the same question again and I just go with my prior answer. I think that -- I don't know if that information was material.

I do think a verdict can give

L. Allen

information about potential values to settle future claims or to settle pending claims, currently open claims.

Q. You say I think a verdict can give information about potential value to settle currently open claims and that's -- I'm asking, is that because plaintiff's counsel, when they see significant verdicts, are going to demand more money to settle pending claims?

A. That could be an effect.

Q. And when the adverse verdicts are significant in amount, if not overturned, it could also effect the historical average cost of settling claims, correct?

A. Sure. Verdicts can -- sure, if you put them in the average, they can effect the average, yes.

Q. Now, you believe that in an efficient market, the stock price reflects the future discounted cash flow, is that right?

A. In an efficient market, the stock price reflects the expected discounted cash

L. Allen

flow, yes.

Q. If Halliburton had to pay more to settle the pending cases against it, that would have an impact ultimately on its cash flow, would it not?

A. Say that again. If Halliburton?

Q. If Halliburton had to pay more to resolve the cases pending against it, that would ultimately have an effect on its cash flow, would it not?

MR. STERLING: Objection. Form.

MR. GOLDFARB: What's the basis for the objection?

MR. STERLING: It's a radically incomplete hypothetical.

A. Relative to what?

Q. Relative to there not being a change in the average cost to settle pending cases?

A. I'm not understanding your question.

Q. If the company has to pay more money to settle pending cases, understanding that some of the increase is going to come

L. Allen
from insurance recoveries, some of the money is also going to have to come from Halliburton's revenue, is it not?
A. I don't know if it has to come from its revenues, but it would have to come from -- if the money is coming from the company, it would somehow have to come from the company.
Q. If more money from the company is going to go to settle pending asbestos claims, that would have some impact on the discounted future cash flow of the company, would it not?
A. If the company has -- if your two alternatives is the company pays more money in the future or less money in the future, then, yes, it will pay more money in the future under one scenario and less under the other, I would agree with that.
Q. If it pays more in the future, what will that impact, if any, have on its future cash flows?
A. Generally, if it pays more money in the future, it will have less money in the

L. Allen
future, it will have lower future cash flows, all things being equal.
MR. GOLDFARB: This is probably a good time to break for lunch.
THE VIDEOGRAPHER: It's 12:59 and we are off the record.
(Luncheon recess taken at 12:59 p.m.)

L. Allen
A F T E R N O O N S E S S I O N
(Time noted: 1:39 p.m.)
L U C Y A L L E N, resumed and testified as follows:
THE VIDEOGRAPHER: It's 1:39. We are back on the record and starting disk 4.
EXAMINATION BY (Cont'd.)
MR. GOLDFARB:
Q. Now, you found that for certain dates when an adverse asbestos verdict was disclosed in your analysis, there was not a statistically significant price movement, even before you corrected for multiple comparisons, correct?
A. That's correct. I think I also found that according to Ms. Nettesheim, plaintiff's expert, that dates when verdicts were announced. Also, according to her analysis, there wasn't statistically significant price reactions.
Q. We will talk about the dates they were announced in a second, but when you looked at whether or not there was a

L. Allen
statistically significant price impact at the time of the verdict, as she says, the verdict was announced, did you test those dates to see whether they would be statistically significant movement if you used different indices as opposed to the E&C and energy service indexes you came up with?
A. So the analysis, and I think I describe it in footnotes to my report, I did the analysis under a different alternatives. One of the alternatives is where I used a Bonferroni adjustment. I also did it with a Sidak adjustment, so that was one alternative.
Q. That's not quite my question.
A. But, in addition, I used an E&C index that came from a list of E&C companies according to Fortune.
As an alternative, I did the analysis using a list of E&C companies as reported by Merrill Lynch, so I did the same analysis using an alternative E&C index.
I think I also used a third alternative for the E&C index, so I think I

L. Allen
mentioned -- we talked previously, I talked previously in my prior analysis, I had four different E&C indices and I believe one of them, when I included it in my event study regression analysis, had a negative coefficient, meaning, that the index in Halliburton's stock price moved in opposite directions. I don't believe I did the event study using that one, but using the other three, I believe I tested for robustness for my results.
Q. You talked about a couple of E&C indices that you used.
Did you test for robustness using any alternative indexes or indices for the energy component in Halliburton's business?
A. I think I did and I think I mentioned that in my report.
Q. If you look at page 12, footnote 20, it talks about some E&C indexes.
A. I did do it using Nettesheim's index, which is an energy index.
Q. Did you report those results in your report?

L. Allen
A. I thought I did. Certainly, I do using the Nettesheim. You will see that's in Exhibit 1, so those are just her results.
Q. But so you ran Nettesheim's analysis, but did you, in your analysis, test any indexes or energy services index besides the one you actually used?
A. My recollection is I did, but I'm not seeing like a footnote to that effect.
Q. You think if you would have done it, you would so note it in your report?
A. I think so, although, honestly, this report is longer than most of my reports, so the allegations and everything -- I would have meant to include what notes of some alternative analyses that I did.
Q. I don't remember seeing it in the report. If you find it at some point during this examination, please point it out, but I don't believe there is anything about an alternative energy services index.
Now, I would like you -- we talked about some of the particular verdicts and if we could look at page 88 of your report. You

L. Allen
point out that the verdict that was handed down on October 26th and that Halliburton reported on October 30th was in some publications before Halliburton reported the news, correct?
A. That's correct.
You're talking about the Mississippi verdict now?
Q. Yes. The first -- you indicate it was reported in two places, one was in the Clarion Ledger, a Mississippi newspaper, and you quote part of it, correct?
A. Correct.
Q. In the last sentence that you quote, it says, AC&S and Dresser Industries in Pennsylvania and 3M Court in Minnesota chose a jury trial.
So it's describing some of the defendants in that action, right?
A. Correct.
Q. Now, you know, do you not, that Dresser Industries is based in Texas?
A. I don't disagree with you. I'm not sure I would know that, though. I don't

L. Allen
recall.
Q. Do you know what the Dresser Industries in Pennsylvania -- what that's referring to?
A. I don't know.
Q. If you look, the next day you say, 3M made a public announcement about the verdict and mentioned Dresser as a co-defendant and if you look at what you quote, it said on the following page, The jury in Lexington, Mississippi awarded a 150 million to the laborers in the lawsuit involving 3M and two Pennsylvania companies, ACS and Dresser Industries.
Is Dresser Industries in your -- do you know, is it a Pennsylvania company?
A. I don't know.
Q. Assuming it's not a Pennsylvania company, do you think the market is supposed to understand that this is the Dresser Industries that's based in Texas, even though the news reports refer to it as a Pennsylvania company?
A. I don't have any indication that

L. Allen

the market was confused about what Dresser Industries was involved in this verdict.

I do note there is an analyst report later that says these verdicts were announced, the Texas and Mississippi verdicts were public to no price reaction.

Q. Until October 30th.

Do you have any indication that the market understood that this Pennsylvania company, Dresser Industries, was actually the Dresser Industries that's based in Texas?

A. I have no understanding they didn't make that understanding. I have seen nothing that plaintiffs ever put forward or anyone has put forward to say there is some confusion about which Dresser Industries is involved in these asbestos claims, so that's an entirely -- nothing I have noticed in the 700 plus analyst reports or other things that have -- so I am not aware of any indication that that led to any confusion for anyone.

Q. There was, in an analyst report, discussing the verdict after the -- immediately after the Clarion Ledger story or

L. Allen

after the 3M release, correct, there wasn't any analyst reports until Halliburton issued a release on October 30th, is that right?

A. There were analyst reports later that mentioned they had been aware of these prior verdicts and saying that despite the fact that the verdicts were public, there had not been a price reaction to them.

Q. Can you point to anything that indicates the market understood that Dresser Industries in Pennsylvania was the Dresser Industries that was based in Texas?

A. I have not found anything that indicates otherwise.

Q. You haven't found anything either way on that issue?

A. It never occurred to me to look, that there was a confusion about which Dresser and that there was some understanding this was some different Dresser that was involved.

Q. Focusing on the verdict and judgement that were released on September 4, 2001, if you look at -- this is discussed in

L. Allen

your report on paragraph 214 and following.

A. Okay.

Q. Halliburton released on that date two different pieces of news, at least, right; one about the verdicts that were -- the verdict that was handed down on September 12th and also announced three judgments that had been entered against it, correct?

A. Correct.

Q. And those three judgments had not previously been disclosed, correct?

A. I believe that is correct.

Q. And those judgments, if you look at, were for $35.7 million and covered a hundred plaintiffs, right?

A. I don't recall the hundred plaintiffs, sounds like something that I remember reading, but -- yes, I see that's what I say, paragraph 218.

Q. It's also in paragraph 211. So it says there was a judgment -- in the same filing, the company disclosed the same District Court also entered three additional judgments against Dresser and a hundred other

L. Allen

asbestos plaintiffs in the aggregate amount of 35.7 million related to an alleged breach of a purported settlement agreement signed earlier in the year by Harbison & Walker.

Do you see that?

A. Yes.

Q. And so if it's a hundred plaintiffs and an aggregate three judgments total an aggregate $5.7 million, that works out to $350,000 per plaintiff, does it not?

A. On average, yes.

Q. That's significantly larger than the amount that Halliburton had previously been settling its cases for, correct?

A. That's larger than the average amount that they had been settling their cases for, correct.

Q. That's a new piece of information that the market would take into account about the company's asbestos liability, is it not?

A. I think it was new information and I think it was information that could be taken into account. The evidence that I put forward is the analysts and other market

L. Allen

commentary did not think that it -- for example, Sun Trust says we do not believe this is incremental news and they are discussing the December 4th announcement.

Q. What page are you on?

A. I'm on page 92, the same page we were on, paragraph 217. So what the Sun Trust analyst says after the December 4th announcement is we do not believe this is incremental news.

Q. If you read what you wrote, it says, Also commented after December 4th announcement that this verdict had been known for weeks, so the analyst is referring to the September 12th verdict, not the three judgments that total $5.7 million, is that not right?

A. I think that's right, although I think if we pull out the actual analyst report, I don't think they indicate that they think the three judgments are important news either.

Q. Do you remember that or do you just think that?

L. Allen

A. It's my recollection.

Q. You quote an awful lot of analyst report in your report, so what, if any, expertise do you bring to the reading of analyst reports?

A. I have reviewed analyst reports in many circumstances, including to analyze the effective information on stock prices. I think that it is helpful to have some experience in what is the type of information that analysts consider, how do analysts do their valuations, how do they report information, so one of the factors that analysts have used in this case to claim that the market is sufficient is to say there were a number of analysts following the stock price and that it's the presence of these analysts digesting the information and discussing it is part of the reason that plaintiffs have concluded the stock is trading in an efficient market, so I have a great deal of experience looking at what do analysts actually say about stock prices and how does that work and how does that relate

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to stock price movement and I think that's helpful, helpful to a factfinder in a case such as this, so I think it's hard for -- first of all, in this case, there are a lot of analysts covering the stock and there are a lot of analyst reports and I think it's helpful to analyze what, in fact, are the analysts saying at various points in time.

Q. My question was a little bit more specific, which is, do you think you bring any special expertise to reading analyst reports that someone else does not? I will rephrase the question.

Do you believe you bring any special expertise to reading analyst reports and, if so, can you please explain what that expertise is?

A. I think I explained some of that in my prior answer, so I have, in the course of my work at NERA, analyzed -- reviewed a lot of analyst reports, I know the sorts of information that analysts include in analyst reports, the types of ways that analysts value a company and how that relates to stock

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prices and stock price movement. I have reviewed a lot of academic literature, how, for example, how analysts earning estimates effect stock price, how other statements by analysts effect stock price. I have spent a lot of time looking at the issue of information that is in analyst reports and how it effects stock prices and I think I do bring some experience and knowledge to that. I think I am not alone in having some experience and knowledge in that area.

Q. Well, are analyst reports -- who is a typical audience for analyst reports, is it brokers and investors?

A. Yes, investors are typical -- analysts are often trying to aid investors in deciding what to do, so these are many of the analyst reports that we're reviewing now are equity analyst reports. They're about the stock of individual companies and analysts are often -- their intention is to aid investors in whether to buy, sell, hold stock. I think I have a little discussion of what an analyst report is in here.

L. Allen

Q. You think you are better able to understand an analyst report than an investor or stockbroker?

A. I think how analyst reports effect stock prices, I have spent a lot more time looking at that, looking at -- to the extent it is relevant here, it may be relevant to the factfinder. I do have some more different and helpful experience in that area because I have compared analyst reports for the same company, I've compared how analysts report information and how it effects stock prices and I have reviewed academic literature that is on that topic.

I don't think the typical broker or investor -- I think their purpose is different. The investor is thinking what should I personally do to invest to make money, so they have a different focus.

Q. When you say you've looked at how analyst reports, you compared how analyst reports effect stock prices, you really are doing a regression analysis to determine what news effects the stock price, right?

L. Allen

A. No, that's not what I said at all.

Q. So my understanding, and please correct me if I'm wrong, you're looking at the analyst reports trying to decide, in part, whether or not something is a corrective disclosure, which is slightly different than whether or not the information effects the stock price. We know the stock price was affected.

The question was, was the information that was released a corrective disclosure or not, and as I understand it, you are looking at the analyst reports to see if something is a corrective disclosure, am I mistaken?

A. You said a whole bunch of things in that question, most of which I would not agree with, so you were asking me what kinds of experience or unique experience I bring to reviewing analyst reports, and I tried to explain that. Now, you've asked me something, I don't know.

Q. You said that you have experience, and I didn't ask you about experience, I

L. Allen

asked you about expertise.

You said you had experience looking at how analyst reports effect stock price.

Can you elaborate on how you look at whether analyst reports effect stock price and whether that's different than determining whether or not a corrective disclosure is, indeed, a corrective disclosure?

MR. STERLING: Objection. Form.

A. Those are two completely different questions. I'm having trouble.

Q. What do you do, how do you look at analyst reports to see whether or not the analyst reports effects the stock price?

A. I mean, that depends on the context. I was describing some of the experience or expertise that I have in reading analyst reports.

Your sort of original question is what do you have that's special and how can you read an analyst report better than somebody else, and I tried to explain in this context, I think I do have some experience that is helpful and relevant and now you're

L. Allen

asking me --

Q. I'm asking you a different question.

A. Okay.

Q. As hopefully, I will, in the course of the deposition.

The question is, you said that you have experience looking at how analyst reports effect stock price.

I'm asking what you mean by that?

A. I said that was one of the things that I have experience in. So, for example, there is an academic literature and I have done a number of these kinds of studies and tests myself to the effect of how analyst's earnings estimates and changes in analyst's earnings estimates, earnings surprises, effect the stock price, so that's one type of analysis that I have reviewed a lot of academic literature about.

I have done many studies myself on that and that is how a change in analyst's earnings estimates and what type of changes in analyst earnings estimates effect stock

L. Allen
prices and how much it might have an effect and how quickly it might have an effect and things like that, so those are things I have studied, tested, read about.
Q. And in terms of the asbestos misrepresentations and corrective disclosures at issue in this case, you didn't bring to bear any of that experience about how analyst earnings estimates effect stock prices, did you?
A. Well, sure. Some of the information and some of the experience I have is actually relevant here. You were asking me how is it that I can offer something in reading an analyst report and I was describing that and one of the things I said was I looked at how analysts effect stock prices and you said, what you do mean by that, and then I gave you an example and it includes information about earnings surprise.
Q. You gave me an example and I said that that example doesn't pertain to your work in this case about the asbestos portion of your report, does it?

L. Allen
A. Certainly some of the experience and knowledge that I gained in doing that was understanding what sort of information is in analyst reports, what -- how analyst reports interpret information and how it can effect the stock price, so I do think that that information is useful.
I didn't directly do an earnings surprise analysis, for example, here, so I didn't do that specific kind of analysis.
Q. I would like to ask you some questions about the verdict that was announced on December 7th, a verdict from Baltimore, Maryland which Dresser's share was 30 million.
That's discussed in paragraph 221 of your report?
A. Yes.
Q. Now, let's assume that your analysis is correct and that the prior verdicts and judgments did not have a statistically significant effect on Halliburton's stock price, let's assume that for the next few questions, and I will tell

L. Allen
you when that assumption ends, okay?
A. Okay.
Q. So even with that assumption, why does that mean that the market will not look at the fourth adverse verdict or judgment disclosed by Halliburton in less than two months differently than it viewed the earlier verdicts or judgments?
A. I don't think it necessarily means that, in and of itself, in terms of it being corrective of the alleged misrepresentations, it's, as I understand plaintiff's allegations, it's no more corrective, so plaintiff's claim that when the -- that the Mississippi verdict was stunning and confirmation that the prior statements regarding asbestos that the company made were false.
To the extent that the Mississippi verdict was stunning confirmation that the prior statements were false, this is no more stunning confirmation that the prior statements were false, so the corrective nature of the December 7th verdict is or the

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announcement of the Maryland verdict is no different in its corrective nature. I'm not saying the verdict isn't necessarily different.
Q. Do all corrective disclosures have to lead to a statistically significant effect on the stock price?
MR. STERLING: Objection. Form.
A. Surely not.
Q. If you have a series of partial corrective disclosures, they can be partial corrective disclosures, even if they don't all lead to a statistically significant effect on the stock price?
A. They might be partial corrective disclosures. If what you're saying is corrective, actual corrective information and its material, then if it has a price impact, you should see the price impact.
Q. You introduced the word material in the answer, which was not in the question, so if you have a series of partial corrective disclosures, they don't all have to have a price impact and they can still be partial

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corrective disclosures, right?

MR. STERLING: Objection. Form.

A. Sure. Because there could be no price impact at all from the alleged misrepresentation, so you could have a whole series of corrective disclosures and it could be the alleged misrepresentation had no price impact. It wasn't material, nobody cared about it and you could have partial corrective disclosures and nobody cares about it, so, sure, and to the extent that you have information that is corrective and is released and the market doesn't care about it, that, in itself, is supportive that the -- of there not being a price impact.

Q. Would you agree that the market would look at the last in a series of four adverse verdicts -- strike that.

Would you agree that the market might look differently at the last in a series of four adverse verdicts or judgments, in short succession, in two months, than it did at the earlier verdicts or judgments in that series?

L. Allen

MR. STERLING: Objection. Form.

A. I think that's possible. What I'm saying here is that the alleged corrective nature of it, if the bad verdict itself is stunning confirmation that the statements of the company regarding its asbestos were false, there is nothing in this verdict that is further corrective. It's no more stunning confirmation, it doesn't, in itself -- it doesn't logically have anymore relationship to the alleged misrepresentations as the plaintiffs have alleged the case.

Q. Why wouldn't the fourth in a series of adverse verdicts or judgments be like the proverbial straw that broke the camel's back and an indication to the market clearer than the earlier adverse verdicts and judgments that Halliburton's prior statements were false?

MR. STERLING: Objection. Form.

A. I think a fourth verdict could be the straw that breaks the camel's back and the market could be worried about the future of asbestos, which is what a number of the

L. Allen

analysts are saying, but they're not saying -- and then that tells us that the company's prior statements about the estimated value of its pending claims is -- was false.

Q. I'm not asking you right now about what the analysts say.

I'm asking, why couldn't the fourth in a series of adverse verdicts be like the straw, the proverbial straw that broke the camel's back and served as an indication to the market that the earlier -- strike that.

Why couldn't the fourth in a series of adverse verdicts and judgments be the straw that broke the camel's back and that revealed to the market that Halliburton's prior statements about its asbestos liability were wrong?

A. Well, if you read what plaintiffs allege, they say the verdict itself is stunning confirmation. There are a couple of verdicts that are larger than the Maryland one and there is no reaction to them. There is a reaction after December 7th, after the Maryland verdict is announced and there is

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some discussion that this is a straw that breaks the camel's back, but not about the prior statements of the company or the value, the prior value of pending claims, but about the future, the future claims that might be filed and then the company, right after the large price drop and right after an analyst says, here is an announcement that is the straw that breaks the camel's back, the company announces its estimates for pending claims that are 125 million, the very same number that they had previously announced and the market commentary is not surprised by this number, so that, in itself, is evidence that just directly contradicts that these verdicts are corrective or considered corrective of something that -- what Halliburton had previously stated about its asbestos liabilities.

Q. I'm not asking you to recite your report or to summarize your report.

I'm asking you particular questions, and I would appreciate it if you could answer the particular question.

L. Allen
So, in your opinion, assuming that you are right and there wasn't a statistically significant effect to the release of that September 12th verdict or the October 30th verdict or to the announcement on December 4th, assuming you are right, there wasn't a statistically significant price movement on those days, does that mean that the release of the news on December 7th could not have been a corrective disclosure?
A. It's all of the other information that I'm saying in addition to that, right. It's no more corrective of what the plaintiffs are claiming was misleading about the prior -- it's no more corrective --
Q. I'm asking you a different question. You are not answering.
MR. STERLING: You have to let her finish.
A. I am answering that question. I'm answering that to the best of my ability. You're saying couldn't this be -- couldn't the fourth in a series be corrective when one, two and three aren't. Is that your

L. Allen
question?
Q. Yes.
A. In what way is it corrective, so in no way that plaintiffs have claimed can I find that there is new information. What plaintiff's claim is that the earlier verdict was stunning confirmation that the -- that's their claim, that's your claim and if that was stunning confirmation, there is nothing more confirmatory in this, it is -- after this announcement, there is commentary by analyst that this is the straw that broke the camel's back, but it's not the straw that broke the camel's back about the prior value of pending claims and it makes no sense to say it's telling you that we're now going to reevaluate the value of pending claims because when the company announces their estimate for the value of pending claims in the quarter immediately after this, it's the same number as previously and the market isn't surprised, so that's evidence that they can't be taking this as a stunning confirmation that the prior statements were

L. Allen
misleading.
Q. You know, you've now three or four different times made the same speech. I do understand --
MR. STERLING: It's because you are asking her the same question.
MR. GOLDFARB: She has not answered the question.
MR. STERLING: She hasn't answered the way you want, but you are asking an open-ended question.
MR. GOLDFARB: She hasn't answered the question.
Q. Let's not deal with this case. Let's deal with a general hypothetical. If you have a series of corrective disclosures which are similar corrective disclosures and you have four within a short period of time. If the first three don't lead to a statistically significant impact on the stock price and the fourth one does, does that mean the fourth one can't be a corrective disclosure?
MR. STERLING: Objection. Form.

L. Allen
A. It doesn't mean the fourth one -- it doesn't, in itself, mean the fourth one can't be a corrective disclosure. I think you need to think about what is it about the fourth one that's different than one, two and three, and in this particular case, plaintiff's logic doesn't make any sense.
Q. Let me ask you about the logic. If there is one adverse asbestos verdict, the market can think that's an aberration, anybody is going to lose some case, if there is two, the market can think it's an aberration, if that's three, the market can think that, but when you get to four adverse verdicts and judgement in short succession, within a period of two months, maybe that's enough to make the market realize that these verdicts are not aberrations, the ones that it didn't react to earlier, because it thought they were aberrations, weren't, and that four makes a pattern and the market reacts to that pattern.
Why is that not a reasonable way the market could react to those facts?

L. Allen

MR. STERLING: Is that a hypothetical you are talking about here or as applied here?

MR. GOLDFARB: First, as a hypothetical.

A. What is the corrective involved in your hypothetical?

Q. Market, statements about a company's liability for legal claims against it.

A. What sort of statements? Statements about the value of pending claims?

Q. Sure.

A. That after the stunning confirmation --

Q. Forget the -- the stunning confirmation is not in the hypothetical, it's not. You can sort of grab on to the stunning confirmation. I'm not asking you that.

In the hypothetical, we have a series of adverse judgments or verdicts in short succession. Isn't that reasonable to say the market, after the fourth one within two months, sees a pattern and treats it and

L. Allen

reacts differently and takes it as a different type of more significant corrective disclosure than the prior ones?

A. It's the corrective disclosure. I think you can say in a hypothetical, that the market can treat new information or another verdict as news. I don't see how you can say it's corrective of what plaintiffs are claiming is misleading in this case.

Q. In your view --

A. Or anymore corrective.

Q. In your view, does -- and we will talk about this case. In your view in this case, does the announcement of the fourth adverse verdict or judgment in two months provide any more information to the market than the announcement of the previous adverse verdicts or judgments?

A. Not regarding the alleged misrepresentations, it is no more corrective of the alleged misrepresentations than the prior. That is my point.

Q. You don't think there is any information in the fourth in a series of

L. Allen

adverse verdicts or judgments, there is no more information embodied in that fourth announcement than in the earlier announcements?

A. It's not what I said. There is no more information that's corrective of prior alleged misrepresentations. I think there could be more information in a fourth verdict, I think a fourth verdict is another verdict. I'm not saying the verdict itself can't be information. I don't see that there is any new information regarding the alleged misrepresentations.

Q. I'm asking about, do you think -- I will try to be clear so we can communicate with each other. I understand that you have acknowledged that a verdict can contain information.

My question is whether or not the fourth adverse verdict or judgment can contain information that's qualitatively different, and I'm not asking about corrective information, information that's qualitatively different in the information

L. Allen

contained in the three earlier adverse verdicts or judgments?

A. I think a fourth verdict can be new information and can be different than the three verdicts and that's true.

Q. And can the fourth verdict be qualitatively different in the information it conveys simply because it's the fourth in a series of adverse verdicts or judgments in two months?

A. I think having four can be different than having three. I don't think it's different regarding the corrective nature, but I do think four can be different than three.

Q. And it can be qualitatively different than three?

A. I'm not sure what you mean by qualitatively different, but it can be different. I'm not sure what qualitatively means.

Q. How, if at all, does your report take into account the implication of the adverse verdicts and judgments?

L. Allen

A. I don't understand the question.

Q. You said a moment ago that the fourth verdict could contain information that was different than the earlier verdicts, and I understood that because it was a fourth in a series, so how, if at all, does your report take into account the fact that the fourth verdict is the last in a series of adverse verdicts and judgments?

A. I think one of the things that I point out is from a corrective nature, the fourth verdict has no more corrective information regarding the alleged misrepresentations, and to the extent the fourth verdict allegedly reveals to the market when the earlier ones didn't that the prior statements and valuations of pending asbestos claims were misleading, that is belied by the result that I describe in my report and it's important, it's an important result and it's -- that when the same -- when the company values its pending claims and reports those numbers a few weeks after and the value is the same, there is not surprise

L. Allen

by the analysts and others following the company, so to the extent the fourth verdict itself in a cumulative way was somehow corrective when the prior ones were not, then you would expect that there would be some surprise if, given the fourth verdict, the company is still reporting estimates and values of pending claims that are essentially the same.

Q. I understand your position. A separate question.

Do you think the $30 million verdict disclosed on September 7th would have had the same impact on Halliburton's stock price if there had not been the three prior adverse verdicts and judgments?

MR. STERLING: Object to the form.

A. I don't know how to answer that.

My report points out that there is a change in the asbestos environment or sentiment about asbestos that happened right at the end of the class period and there are -- I don't know what -- I don't think that change was foreseeable because, for

L. Allen

example, had I foreseen that change, this is a lot of money on the table, I would have been shorting some of these stocks in those few days, so I don't know how to answer that question. I can't predict what would have happened.

Q. So the short answer is, you don't know what would have happened if the December 7th verdict -- if the verdict -- never mind -- I withdraw that question.

If you look at page 97, paragraph 228, and you are talking about the Maryland verdict here, analyst's commentary following the December 7th announcement shows the market did not view it as indicating that Halliburton had mislead the market about its asbestos liability, right?

A. Which paragraph?

Q. The last sentence in paragraph 228.

A. Yes.

Q. In your view, was it necessary that the analyst comments on the verdict indicate that Halliburton had misled the market about its asbestos liability for this verdict to be

L. Allen

a corrective disclosure?

A. I don't think it's necessary for it to be a corrective disclosure. I think the fact that what the analysts say is inconsistent with the plaintiff's claim, so the plaintiffs are claiming that the verdict itself is -- or a prior verdict is stunning confirmation that the prior statements were misleading and I think the fact that none of the analysts or the analysts are not saying -- the last of commentary consistent with the claim, as plaintiffs have -- with their claim, I do think is evidence.

I don't think, in general, it is always the case that analysts have to say that they were misled. I think, given what's actually alleged in this case, it doesn't -- it's strong evidence contrary to plaintiff's claim, in other words, it's not always the case with every time of misrepresentation that because analysts don't say that they were misled that something can't be a corrective disclosure. I think, in this case, it's very strong evidence.

L. Allen

Q. Why is it strong evidence in this case?

A. Because what the plaintiffs are claiming is that the company's statements about its asbestos liability were misleading, the company was saying that we have -- so, for example, plaintiffs claim that the market realized that the 125 million was false. I think I have some quote about that. The 125 million that Halliburton had estimated as its value of currently open claims and if that statement were misleading and if it were true that a verdict such as this revealed that, then it wouldn't make any sense to have the analysts continuing to -- for one to say we don't think this is really going to hurt the company, we think these verdicts and judgments have good chances on appeal, we think a large portion will be covered by insurance and then a few weeks later, when the company announces the 125 million, they don't say how could they possibly announce this, we think -- we don't think these numbers are reasonable.

L. Allen

Q. Let's look at some of what the analysts say in paragraphs 226 and 227, which these are analyst reports that were published on December 10, 2001.

A. Okay.

Q. You remember that Halliburton held a call with analysts earlier in the morning on December 10, 2001, right?

A. Correct.

Q. And, in fact, a lot of what the analysts are saying are repeating what Halliburton executives and counsel told them in that analyst call, right?

A. Some of what they are saying is repeating that, correct.

Q. When analysts are repeating what the company has told them, does that effect the weight you place on the analyst reports?

A. I wouldn't be able to answer that question, as a general. This is at a point after the end of the class period when plaintiffs are claiming, the truth has come out and the market has learned the truth, so to the extent that analysts are saying things

L. Allen

that are contrary to what plaintiff's claim are is the truth, which the market has learned, I think that...

Q. To the extent analysts were repeating what Halliburton has said we think we will win these cases on appeal and they don't have an independent way of verifying that claim, what weight do you place on that?

MR. STERLING: Objection. Form.

A. A number of the analysts say, they say Halliburton says this and they say they believe it. I'm not saying whether I think it is true. One of the things I note is that after the truth has supposedly come out to the market, the analysts are saying we think these verdicts have a good chance of being overturned on appeal and we think a large portion of it will be paid by insurance.

Q. The December 7th corrective disclosure could still be a partial corrective disclosure, correct?

A. I don't think it's corrective of the misrepresentations, as alleged by the plaintiffs, but just because they're

L. Allen

repeating what the company said, it doesn't, one way or the other, make it not a corrective statement.

Q. Do you place less weight on analyst reports when the analysts are simply repeating what the company said?

A. Weight in terms of what?

Q. Weight in terms of forming your opinion.

A. One of the things I look to analysts and other market commentary is to see what information was public at various points in time, so to the extent that an analyst repeats something or says something at some point in time, I can at least date it to a particular date, so you would have to.

Q. Do you think a statement of a company official, for instance, a company they expect to prevail on appeal, takes on any added significance because that statement is repeated, broadcast by an analyst?

A. To the market, do I think it has? I'm not sure what you're asking. I think the analysts believed the company had a strong

L. Allen

case on appeal for these. I'm not sure that that's particularly relevant to my findings in this case, but my reading of the analyst reports, as they believe that Halliburton has a good chance of overturning or reducing these verdicts or judgments on appeal.

Q. If you can turn to page 82, paragraph 183. You say, the last sentence is, I found that analysis of other companies with asbestos exposure demonstrated that Halliburton's price decline at the end of the class period was due to changing conditions, not the alleged fraud -- before that, the sentence says, I found the stock decline at the end of the class period was attributed to an increase in uncertainty and change in an economic and asbestos environment that also affected other companies.

Do you see that?

A. Yes.

Q. And when you say, I found that the stock decline at the end of the class period was attributed to, and you list two things, do you agree that those two things, the

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increase in uncertainty and change in economic and asbestos environment to what caused Halliburton's stock price to go down so much on December 7th?

A. I think a big cause of the stock price drop was an increase in uncertainty about the future of asbestos and asbestos litigation, not only as it applies to Halliburton, but as it applies to other companies.

Q. A couple of just clarifying questions.

Are you distinguishing between an increase in uncertainty on the one hand and a change in the economic and asbestos environment on the other hand? Are those separate factors or the same factor?

A. I think there is a little of both, I guess, and this, again, is sort of the kind of intro section to this section, so this -- this is meant to summarize the sections that are to follow.

Q. Right. But are those separate factors or the same factor?

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A. I think -- one of the -- what I note in the parts that follow is there is much more of a focus on asbestos in the finance community, so there is much more interest and concern about asbestos and there is an increase in uncertainty, in general, in and a skittishness in the market and some of that is attributed to Enron, so there has recently been the sort of Enron collapse and that would not be an asbestos related, that would be an economic uncertainty and some of it is specific to asbestos, so, in some ways, it's related and some ways, it's separate.

Q. So I want to make sure I understand your position and am I right that your position is that there is a partial, but not total overlap between increase in uncertainty on the one hand and a change in the economic and asbestos environment on the other hand?

A. Yeah, and I would say if you read what I have in there, this is saying what the stock price decline was attributed to and so some of the -- a lot of the discussion is about increased uncertainty and much of it is

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related to asbestos.

There is some other discussion that the market is just more uncertain and skittish than usual, given the recent events regarding Enron.

Q. It's really not -- I just want to understand your opinion, so if you could please just state it clearly. You think that the stock dropped because of uncertainty and a change in economic and asbestos environment, right?

A. Here, I'm describing what the market --

Q. Forget about a particular page.

MR. GOLDFARB: We need to not have the same answer 25 times.

Q. Ms. Allen, forget about that particular page and that particular paragraph. You say similar things. I'm asking about your conclusions as to why the stock dropped on December 7th.

Is it or is it not your opinion that Halliburton's stock dropped on December 7th because of an increase in uncertainty and

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changes in the economic and asbestos environment?

A. My conclusion is the stock did not drop because of corrective information regarding the alleged misrepresentations. That is the question that I have specifically addressed and concluded in my report. I have found that there is a lot of discussion and a lot of evidence showing that there is an increased uncertainty at the end of the class period and there is particularly a shift in the sentiment about asbestos and a greater concern about asbestos and a greater degree of uncertainty about future asbestos, that happens at the end of the class period.

I have specifically analyzed whether there is any evidence that the price drop at the end is from corrective information regarding the alleged misrepresentations and I have found that not to be the case, that I do not see evidence to support that.

I note a number of things that the stock price drop has been attributed to --

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including overreaction and irrationality in the market which, themselves, are not consistent with plaintiff's claim of market efficiency. I have not concluded what exactly caused how much of the stock price drop except that I don't see any evidence that any of the stock price drop was caused by corrective information of the alleged misrepresentations.

Q. So I want to be sure I understand your opinion.

So your opinion is that none of the stock price drop on December 7th was caused by the alleged corrective disclosures, right?

A. No, because the alleged corrective disclosures are announcements. I'm not saying the stock price drop wasn't caused by the announcements or the announcement wasn't, in part, the cause. I'm saying the price drop wasn't caused by the alleged misrepresentations or corrective news of the alleged misrepresentations, so plaintiffs are claiming that the announcement, the company's announcement of this on December 7th, is a

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corrective disclosure and I'm saying not that the announcement itself didn't cause a stock price drop, but that any corrective allegedly corrective portion of the announcement isn't what's causing the stock price drop.

Q. So you're opining as to what is not causing the stock price drop, correct?

A. I am looking at whether there is price impact from the alleged misrepresentations and as part of that, I am looking to see whether there is any evidence that the price was dropping after the end of the class period because of corrective information from the alleged misrepresentations and I find no evidence for that, I find no price impact.

I also have looked to try to understand why is the stock price dropping and I have described and I have a bunch of analysis in my report that shows an increase in uncertainty, an increased focus on asbestos, a changing focus on asbestos and other comments by market participants, including discussion that there is a recent

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Enron events that have made the market more skittish.

Q. If you could please answer my questions and not launch into long speeches. I have specific questions and please answer the questions.

Question 1, you are opining as to -- you're offering an opinion as to what did not cause the stock price to drop, correct?

A. I'm particularly offering an opinion about price impact regarding the alleged misrepresentations. As part of that, I have looked at whether the alleged misrepresentations and/or the corrective disclosure of them were the cause of the stock price drop after December 7th.

Q. You've concluded the answer to that question is no?

A. Correct.

Q. Have you offered an opinion as to what did cause the stock price to drop?

A. I have mentioned a number of factors that I see contributing to the stock

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price drop and I think I mentioned all of the ones I can think of in my prior answer, so I refer to that.
Q. You talk about increase in uncertainty and a change in the changing -- you talk about an increase in uncertainty and change in economic and asbestos environment.
Is your opinion that those factors increase in uncertainty and change in the economic and asbestos environment contributed to 100 percent of Halliburton's stock drop on December 7th? Yes or no, and please feel free to explain.
A. I haven't tried to answer that question.
Q. So you don't know how much of Halliburton's stock price dropped on December 7th is attributed to uncertainty and changes in the economic and asbestos environment?
A. Attributed to others, I do have some comments about. You said attributed.
Q. I did not mean to ask you about attributed.
Do you have an opinion about how

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much of Halliburton's stock price dropped on December 7th was caused by uncertainty and changes in the economic and asbestos environment?
A. I think it's a large portion. I have not done an analysis of what -- I have particularly focused on whether the misrepresentations had a price impact. I have not -- I think a large portion of the stock price decline is due to increasing uncertainty and increasing fears about asbestos in the future.
I have not determined the exact amount that is due to one component versus another component and I have tried to discuss and analyze a number of the factors that I think are, I think, including overreaction that I think are accounting for the stock price decline.
Q. Now, you mentioned as nonculpable factors affecting the stock price, an increase in uncertainty and changes in the economic and asbestos environment.
Am I correct that you have not

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attempted to quantify how much of the stock drop on December 7th was a result of those specified nonculpable, in your view, factors?
A. Only to the extent that I have found zero to be related to the alleged misrepresentations, so, therefore, I'm finding 100 percent is due to nonculpable factors, including potential overreaction.
Q. What nonculpable factors do you believe contributed to the stock price drop on December 7th, other than changes in uncertain -- strike that.
What nonculpable factors do you believe contributed to the stock price drop on December 7th, other than an increase in uncertainty and changes in the economic and asbestos environment?
A. I tried to lay some of those issues out, so I think there is -- they may fall into the same categories. I've tried to describe in my report and perhaps they can all be included within those general categories.
Q. Was there any that cannot be

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included in those general categories?
A. The overreaction and -- I think they could all be included somehow in those general categories.
Q. So is it your opinion that none of the drop in Halliburton stock price on December 7th was a result of information that only had an effect on Halliburton?
A. I don't understand the question.
Q. I will repeat it.
Is it your opinion that none of the drop --
A. I don't think repeating it will make me understand it better. I don't understand it, not that I didn't hear it.
Q. What don't you understand about the question?
A. I don't understand what it means.
Q. Is it your view that there was a radical change in the market on December 7th and that this change affected other companies that had asbestos liability, not just Halliburton, correct?
A. I think there was a change, an

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increased uncertainty and a change in the perception and sentiment about future asbestos, as well as perhaps other things that affected the market at this point. I think it didn't effect all companies exactly the same, if that's your question.
Q. No. In your view, it affected other companies, not just Halliburton, right?
A. Yes.
Q. And the other companies it affected are other companies with asbestos liability?
A. I think it affected, in part, other companies with asbestos liability. It may have also affected other companies that -- there may be other companies for other reasons that were affected, so there may be other companies that the market also became skittish about for other reasons, but I see more of this effect related to companies with asbestos exposure, so a lot of the uncertainty and discussion about change I see revolving around asbestos.
I do note some other Enron-related effects that could possibly effect other

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companies that don't have asbestos exposure, I didn't particularly look into that.
Q. Is it your opinion that none of the drop in Halliburton stock price on December 7th was a result of company specific information regarding Halliburton's asbestos liability?
A. No.
Q. Were other companies affected equally by -- strike that.
Did you attempt to do any kind of disaggregation of the effect of the news released by Halliburton on December 7th and disaggregate the effect of any part of what it announced from any other part of what it announced?
A. Yes, I tried to disaggregate the allegedly corrective information and information regarding the alleged misrepresentations. That is what I tried to do and I saw there was no price impact from allegedly corrective information. I did not try to separate the other pieces and the other effects. What I have done is to say,

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do I see price impact from the alleged misrepresentations and, no, I do not, and I have not tried to otherwise parse anything else out.
Q. Did you try to do any statistical disaggregation?
A. No. Well, I did try to do some statistical disaggregation because I have an event study, so there is some statistical analysis in terms of determining -- so my whole analysis includes information that is statistical in nature and many of my findings -- I do have an event study analysis and so many of the findings in my report use the event study analysis.
Q. Did you try to do a statistical analysis to disaggregate the effect of culpable and noncul -- strike that.
Did you do a statistical analysis to try to disaggregate the effect of culpable and nonculpable news on December 7th?
A. Yes, I did. So that is what I tried to do, is to try to look and see the corrective information that plaintiffs are

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claiming came out as a result of these verdicts, did that have any price impact.
Q. What statistical analysis did you do?
A. One of the statistical analyses I did is look at dates when public information regarding these other verdicts that were supposedly stunning confirmation that the prior -- Halliburton's prior statements regarding asbestos were false, looked to see whether there was statistically significant market price reactions to those announcements, as well as what market commentary there was at the time.
Q. Did you attempt to disaggregate the corrective effect resulting from the alleged prior minimization of asbestos liability and the negative effect following the announcement of a new asbestos verdict rendered on December 5th?
MR. STERLING: Objection. Form.
A. Sorry, I didn't understand that one.
Q. Did you attempt to disaggregate the

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corrective effect resulting from the alleged prior minimization of asbestos liability and the negative effect on the announcement of a new asbestos verdict rendered on December 5th?

MR. STERLING: Objection. Form.

A. I still don't understand it.

Q. When I asked you before if you had done any statistical analysis, you talked about event studies you had done of dates when other asbestos verdicts were released.

Did you do any statistical analysis running a regression on December 7th to try to disaggregate the effect on December 7th of the, in your view, culpable and nonculpable news regarding Halliburton?

A. So I did a number of statistical analyses and --

Q. On December 7th?

A. So one of the things I did was to look to see whether there really was a change in Halliburton's stock price and how it reacted to asbestos, reacted along with other companies with asbestos exposure and how

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it -- I did see that that change, so, for example, I did a Chow test to see whether there was a significant like change in regime that happened at the end of the class period and I found that that was the case and that happened right at the end of the class period, so that's one statistical test I did that hinged right on the end of the class period.

Q. In your review of analyst reports, did you find any analyst reports that were inconsistent with your conclusions about why Halliburton's stock price dropped on December 7th?

A. Yeah. So I would say I read hundreds of analyst reports and all of the analyst commentary is not consistent with each other and I think there are comments here and there that are inconsistent with some of my -- some of the statements in my report, so there are analyst comments that are outliers from other commentary and I've considered those comments, but I wouldn't say every single analyst at any every point in

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time all said the same thing.

I have tried to mention that there can be -- for example, I guess it's not an analyst report, but the complaint mentions a news story or a posting in The Street.com and I would say that particular comment is not consistent with any analyst commentary that I saw.

Q. Excluding The Street.com, did you find analyst reports that were inconsistent with your conclusion as to why the stock dropped on December 7th?

A. I don't think I found analyst -- my conclusion is that it was not dropping because it was not curative of the alleged misrepresentations, so I don't think I saw any analysts saying the contrary.

Q. Did you find any analysts, again, excluding The Street.com, giving explanations for why the stock dropped, other than an increase in uncertainty and a change in the economic and asbestos environment?

A. Sure. So there is -- one said this is a straw that broke the camel's back.

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There is others saying that investors are worried about the future asbestos claims. There were -- I think they're generally saying the stock price drop is due to increase in uncertainty and due to fears in asbestos and I don't think any of them say the stock price is dropping because we've learned the prior statements of the company were misleading.

Q. Excluding whether or not they say the prior statements of the company were mislead, did you find any that were inconsistent with your opinion as to why the stock price dropped and, again, excluding The Street.com?

A. I don't think I really said why the stock dropped. I think I said why the market attributed the stock price drop to and I think I describe it as falling into some general categories.

Q. So if your report, at some point, reads as if you gave an affirmative reason for why you think the stock price dropped, that was inartful wording because you are not

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opining on that?

A. Well, I would say I am describing the factors that the market is attributing to the reasons and I would agree with some of those reasons.

I haven't said 100 percent of the drop or 90 percent of the drop is due to increased uncertainty and 10 percent is due to something else.

What I have tried to do is say, is any of it due to the corrective disclosures. That is the part I have tried to isolate. The relative weights of differing factors are how, in fact, what is the difference between a changing asbestos environment and an increased uncertainty. I don't even have a firm distinction in mind because I don't think that was particularly relevant here, so I haven't tried to parse the drop into its various components.

Q. I understand that it's public announcements, public events that effect the price of the stock, the market reacts to what is public.

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Did you look at what Halliburton executives said as to why its stock price dropped on December 7th or any other date in the class period?

A. I looked at the public statements of Halliburton and I tried to look at all the public statements. I did not look at internal documents on what someone might have said internally or their thoughts on why the stock dropped, no.

Q. Do you know what someone like David Lesar, long time head of Halliburton, said about why the stock price dropped on December 7th or another date is relevant to determining why the stock price dropped?

A. I wouldn't think it's particularly relevant. I think someone who runs a big company might be very good at running a big company. I don't think they spend time analyzing academic literature on what moves stock prices.

Q. I'm not asking if it's particularly relevant. I'm asking if it's relevant.

Do you think what someone, such as

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Mr. Lesar, said as to why the stock price dropped is relevant to determining why the stock price dropped? Yes, no and explain, if you wish.

A. If he made a public statement, I would have looked at it. I'm not sure that private statements that he made -- I wouldn't particularly have thought to call him up or call someone like him up to analyze why a stock price moves. That wouldn't be -- I'm not aware of that as particularly being a particularly good way to analyze stock price movements.

Q. So it's your opinion that the head of a company, such as Mr. Lesar, does not have relevant information as to what is causing the price of the stock of the company he runs to move?

MR. STERLING: Objection. Form.

A. I wouldn't say he doesn't have relevant information. I don't think that would be particularly more relevant than the types of information that I have looked at. It would not be my general practice to

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discuss stock price movements with CEOs of companies to figure out like how a stock price, why a stock price moves or how much or parse stock price reactions. I am not aware of that being a generally used methodology.

Q. If you can turn to page 97 in your report, you say in the end of paragraph 229, The fact that other companies with asbestos exposure were simply affected demonstrates that Halliburton's price decline at the end of the class period was not due to the revelation of alleged fraud, but to the change in the economic and asbestos environment.

Do you see that?

A. I don't actually.

Q. Last sentence in paragraph 229.

A. Okay.

Q. What's the yardstick by which you determine whether other companies were similarly affected?

A. There would be different yardsticks in different contexts. The point here, and that is, again, one of those summary

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paragraphs where the detail is in a later section, the point here is if the price reaction at the end of the class period is the fact that the verdict was stunning confirmation that Halliburton's prior statements regarding asbestos were false, then there would be no expectation that that information would cause a stock price reaction to other companies that were not part of this alleged fraud and the fact that there are large stock price declines that are attributed to this announcement, including billions of dollars in market cap or Viacom stock is not at all consistent with the claim that this is correcting a prior fraud. It wouldn't make sense that correcting Halliburton's prior alleged fraud regarding its asbestos could cause a $12 billion drop in Pfizer or Viacom stock.

Q. Let's talk about that stock on page 104.

A. Sure.

Q. Why did you measure the stock drop for those companies in market capitalization,

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not in the percentage decline?

A. To illustrate that these are large dollar amounts that the -- that if, as plaintiff's claim, this announcement is correct, that Halliburton had previously fraudulently misrepresented its asbestos information. This is to say that kind of a corrective disclosure is having -- it's billions of dollars here that the market -- these are drops that the market is attributing to this Halliburton announcement, if the announcement is correcting Halliburton's prior fraud, as hard to explain, $12 billion change, this isn't an insignificant amount, this is a large amount.

Q. None of these other companies had a percentage stock drop on December 7th that was as large as Halliburton's, did they?

A. No, their percentage was --

Q. Much smaller than Halliburton's?

A. Their percentage was smaller, but --

Q. That was the question, so the question was, was it smaller? In your

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asbestos index --

MR. STERLING: Let her finish her answer.

MR. GOLDFARB: I think --

MR. STERLING: You cut her off.

MR. GOLDFARB: As long as it's responsive to the question. I don't want a speech that isn't responsive to the question, if it's responsive, certainly.

A. What date was your question about?

Q. December 7th.

A. These are the market cap -- the chart we were looking at are the market cap changes that are among two days, December 7th and December 10th, and Halliburton's stock price actually went up substantially on December 10th.

Q. And including December 7th and December 10th, none of these other companies had as large a percentage stock drop as Halliburton, did they?

A. I don't know if that's the case. I don't see the relevance, but I'm not sure if

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it's the case or not.

Q. Did you look at that?

A. I didn't particularly look. I did look at what their --

Q. I just asked if you looked at that, not what else you looked at.

A. Hold on. I'm trying to tell you what I looked at.

Q. You can do that later. Your counsel can ask you questions.

A. I'm trying to tell you what I looked at, is that is perhaps the same as that.

Q. If it's the same, if it's not, I don't want a nonresponsive answer.

A. I do show Halliburton's stock price movement on the 7th and the 10th in my report and I did have to look at those for these companies in order to calculate, so I think those are unadjusted price reactions, so I did have to look at the actual stock price movement and turn it into a market cap movement.

MR. GOLDFARB: I think this is

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probably a good place to take a break. We have to change the tape shortly.
THE VIDEOGRAPHER: It's 3:19 and we are off the record.
(Recess.)
THE VIDEOGRAPHER: It's now 3:51. We are starting disk 5 and we are back on the record.
Q. Now, Ms. Allen, is it your opinion that Halliburton stock would have dropped on December 7th as it did if the December 5th verdict that was released on December 7th had been against another company with asbestos liability and the verdict was released on December 7th?
A. No, I have not made that finding.
Q. I didn't ask you if you made that finding.
I asked you if that is your opinion or do you not have an opinion on that issue?
A. I haven't looked at that issue, no.
Q. Did you determine the market capitalization loss on December 7th and December 10th for all the companies in your

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asbestos index or just the ones listed on the chart on page 104?
A. The chart on 104 was the ones with large stock declines, so...
Q. My question is whether you figure --
A. I'm still answering the question.
So I described some other companies that analysts mention, similarly reacted to fears of asbestos and uncertainty at the end of the class period and I believe the chart here was to show the ones with large market cap decline, so, somehow, I selected these to be the large ones, so I knew, in some sense, the other ones were smaller, but I don't recall if I did an exact calculation.
Q. Couldn't you use your post class period regression containing the asbestos index to evaluate the extent to which the change in the asbestos index on December 7th or December 10th could explain Halliburton's price movement on those days?
A. Look at the extent of the asbestos index could have explained those movements?

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Q. Included in the asbestos index, as part of the regression, to determine to what extent having the asbestos index would explain the change in Halliburton's stock price on December 10th or December 7th?
A. I'm not sure I understand what you are saying, but I think you could run such a regression and I think that -- so I did look at including the asbestos index during the class period, as well as after the class period.
Q. My question is, did you run your regression, including your post class period regression, including the asbestos index on December 7th or 10th to see what results it revealed?
A. I don't understand that question.
So I think I ran regressions during the class period, including an asbestos index and during the class period without an asbestos index and ran regressions after the class period with an asbestos index.
Q. What I'm asking is, did you check to see if you included the asbestos -- so

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in -- in the post class period regression that you ran started on what date, on December 7th, December 10th?
A. It probably says here somewhere. I don't recall.
Q. I will ask you a different question, Ms. Allen.
A. Okay.
Q. Did you calculate or could you calculate an expected return on December 7th and December 10th that includes a control for your asbestos index?
A. I did do during the class period, I did run a regression, a market model that both included the asbestos index and excluded the asbestos index, so that's described in my report, so, yes, I did do that.
Q. Did you do it on December 7th, using the asbestos index that you use in your post class period regression?
A. I did a regression using the asbestos index during the class period, as well as after the class period.
Q. You ran that regression for

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December 7th?

A. I ran the regression over the class period, as well as for a year after the class period.

Q. What was the expected return for the class period regression, including the asbestos index on December 7th?

A. I don't recall that as I sit here.

Q. Is that in your backup someplace?

A. I don't know. The regression result itself might be here. I don't think I show every day.

Q. What page are you on?

A. Exhibit 2-B, regression one year after the class period.

Q. It doesn't indicate by day?

A. No.

Q. Is there any -- you agree that you could run the regression, including asbestos index, for either December 7th or December 10th, right?

A. You run the regression, so I'm running the regression over a year and then over the class period, you don't run the

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regression over a day, I'm running the regression, so I did two different regressions here that are shown in Exhibit 2-B; one is a regression I ran over the class period and another is one that I ran one year after the class period.

Q. So let's take the one you ran one year after the class period. Couldn't you run that same regression for December 7th to calculate an expected return for Halliburton stock on December 7th?

A. You wouldn't run -- you could use -- the regression is run over a number of days, in this case, it is run over 250 days. So you wouldn't run the regression over one date, so the class period I'm running -- the number of observations here, the one I ran over the class period is 598 observations, so I ran that over 598 days and the second regression, I ran over 250 days, which was...

Q. As part of your regression, you come up with an expected return for Halliburton stock on a given date, correct?

A. Not really as part of the

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regression, you could -- the regression gives you the relationship, so you could look at the results of the regression here. The regression here gives you the relationship, the estimated relationship between the returns on Halliburton and the returns on these various indices.

Q. Then you use that to come up with an expected return on a particular date?

A. You can, yes.

Q. Did you do that to come up with an expected return on December 7th or December 10th, including the asbestos index as part of the regression you ran?

A. Yes. So as I described in my report, I did, as an alternative, do the event study also using an asbestos index.

Q. Did you report that expected return on December 7th or December 10th?

A. No.

Q. Is there any reason that such a procedure would be invalid or improper in your view?

A. I don't think I reported the

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expected return on any date in my report.

Q. But, in your views, is there anything improper about running a regression analysis, including the asbestos index in that regression analysis and then using that regression analysis to predict the anticipated price of Halliburton's stock on either December 7th or December 10th?

A. For what purpose?

Q. For the purpose of trying to see whether you can segregate a company's specific change in the stock price from the change in the stock price that can be explained by the asbestos index?

A. I'm not sure if that would particularly answer that question. I don't know what question you would want to answer that with. I'm not sure exactly what you mean by that.

Q. I asked you if there is anything improper with doing that analysis.

A. I couldn't say whether there is something improper with it until I actually understood what you were doing and what the

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purpose that you were doing it for.

Q. I just explained what the purpose was.

Do you not understand what I said the purpose was?

A. I do not understand the purpose that you said, no.

Q. The purpose is to see how much of the Halliburton's change in stock price on December 7th or December 10th can be explained in terms of the asbestos index?

A. For what purpose? I don't understand that.

One of the things that I have said is during the class period, the asbestos index adds no explanatory power to Halliburton's stock price above what is already explained with an energy index and E&C index.

Q. I am not asking about the class period as a whole. I'm asking about two particular dates. I'm asking on December 7th, there was a very large change in Halliburton's stock price. Couldn't you run

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a regression, including the asbestos index and then use that to come up with an expected return for Halliburton's stock on December 7th as a way of trying to determine how much of the change in the stock price was caused by industry-wide asbestos concerns?

A. No, I don't think that would answer that question.

Q. Why not?

A. It wouldn't answer what extent of the stock was caused by industry -- caused asbestos concerns.

Q. Why wouldn't the inclusion of the asbestos index in the industry do that?

A. Because one of the things, for example, one of the things that I have shown is that that index itself doesn't add any explanatory power beyond that of the market, the energy and E&C companies, so it's not --

Q. You have shown that for the class period as a whole. I'm asking about a particular date, December 7th and also December 10th.

A. But that's the way this analysis

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works, you take a period and you look at the relationship between the indices and the returns of the company and given that historical relationship, you then predict what would happen on another day, given what your index did, but if you've already seen there isn't a relationship, it really wouldn't make any sense to make a prediction on something that didn't have a relationship.

Q. Let's turn to your Chow test which you ran and you found that that shows -- before we get to that, what would be wrong with using your post class period regression to do that analysis?

MR. STERLING: On December 7th or 10th you mean?

MR. GOLDFARB: Yes. Thank you.

A. I don't see how that would -- it's not -- I don't know what you're trying to get out of that. I don't see how, as you've described it, it could answer the question you are trying to ask.

Q. First tell me if there is something methodologically wrong with what I'm

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proposing and then we can discuss whether or not it would provide any answers to the question that I'm interested in.

Is there anything methodologically wrong with doing that analysis using your post class period regression and coming up with a predicted stock price for Halliburton on December 7th and December 10th?

A. So one of the things that I'm showing in my report is that there is a change in the relationship between Halliburton stock and the asbestos index.

Q. Right. That change took place on December 7th, right?

A. I see that change happening right at the end of the class period.

Q. So I understand that.

So now I'm asking you what, if anything, is wrong with using your post class period regression, including the asbestos index to try to come up with a predicted price for Halliburton stock on December 7th and December 10th?

A. Given that you know this is a

L. Allen

period where the relationship is changing, it is not methodologically sound to take a different period and try to predict something at a point where you've just shown there is a change.

Q. So your opinion is it's impossible then to come up with a predicted price for Halliburton's stock on December 7th and December 10th in a methodologically appropriate way?

A. That's not what I said.

Q. It's a different question.

Is that your opinion?

A. No, it's not my opinion. You started with your question with -- so as if it was a summary of my prior answer and it's not what my prior answer is. No, I don't think that's correct.

Q. How would you go about determining or predicting a price for Halliburton stock on December 7th and December 10th?

A. Well, one of the ways I have done is I have done -- I do have a market model that looks at the relationship during the

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class period of Halliburton's stock price to an energy and an E&C index and I have done a prediction of Halliburton's stock price movement, given the historical relationship of Halliburton's stock to those indices and those are some of the results that I've described in my report.

Q. So given the fact that you think there is a structural change as of about December 7th, do you think that method is appropriate to determining or predicting Halliburton's anticipated stock price, expected stock price on December 7th?

A. Predicting it for what purpose?

Q. Forget for what purpose.

Given your view that there is a regime change or structural change on December 7th, do you think that your class period regression is an appropriate model for using to come up with an expected return for Halliburton's stock on December 7th?

A. So one of the things that I say is that asbestos information during the class period, you can't look at how asbestos

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information affected the stock price at the end of the class period to see how it would have affected the stock price during the class period because it's very different, and I showed some examples of companies that had asbestos news during the class period and they didn't react and then similar news after the class period has -- there is a large reaction in the stock prices, so one of the things that I have found is that Halliburton's relationship to asbestos news during the class period was different than it was around December 7th and December 10th and I think if you had taken the historical relationship, the price reaction after December 7th and 10th is not foreseeable and predictable.

Q. Do you think your class period of regression is an accurate way of coming up with an expected price for Halliburton stock on December 7th?

A. So the -- I don't think the model that explained Halliburton stock price well during the class period does a good job of

L. Allen

explaining the stock price movement on the 7th and the 10th, which is one of the things I say, the stock price reaction, and it's also one of the things the analysts are commenting on. There is a large reaction on the 7th that many analysts say is irrational and an overreaction. It's not something you would predict, given a model and given how Halliburton's stock price reacted to asbestos information during the class period.

Q. Let's talk about the Chow test you did. This is discussed in paragraph 269 of your report?

A. Okay.

Q. Now, you found, didn't you, that there was a structural break or regime change as of about December 7th and how Halliburton stock traded with respect to your asbestos index?

A. That's right.

Q. Doesn't your finding through the Chow test that there was a regime change on or about December 7th and how Halliburton stock traded with respect to the asbestos

L. Allen

index provide statistical evidence that investors change their views regarding Halliburton's asbestos liability on about December 7th?

A. I think it shows that investors change their views as is -- the test alone doesn't show that, but along with the commentary that investors change their views about and their sentiment about asbestos in the future, so there is much greater uncertainty about asbestos, there is more fear about asbestos and those changes were not just Halliburton specific, but affected other companies stock prices, as well.

Q. Did you do anything to -- first of all, is it possible to test your theory that those -- is there any statistical test as to whether or not those changes -- strike that.

In your view, is it possible to test to what extent those changes affected Halliburton's stock price on December 7th?

A. I guess I'm not understanding the question.

Q. You said that investors change

L. Allen

their views and sentiment about asbestos in the future and there was greater uncertainty and that, in fact, did not serve Halliburton, but other companies.

In your view, is there any way you can test to what extent that change, which you say took place on or about December 7th, affected Halliburton's stock price on December 7th?

A. You are asking me to parse that from that change compared to other information or other changes that may have affected the market?

Q. I'm asking if there is any way to test that or parse that?

A. I don't know. I haven't tried to parse out. As I said before, I did not parse the price reactions at the end of the class period, other than whether any of the price reaction was due to the alleged misrepresentations and alleged corrective information, so to the extent that it's due to expectations of -- changing expectations regarding the future of asbestos or increase

L. Allen

in uncertainty, I have not parsed out the difference between those or whether there is some Enron effect or other, so I have not parsed out individual pieces and I don't, as I sit here, have a specific method for doing so.

Q. Do you have an opinion as to whether it would be possible to parse that out?

A. It may be possible to estimate the individual effects of that. I have not been asked or considered how to do that, but if I spent some time thinking about it, it might be something that would be -- that I could come up with some methods for.

Q. And doesn't your finding that there was a structural break on or about December 7th provide statistical evidence that the market was believed -- was now significantly different about Halliburton's asbestos liability and what Halliburton had stated during the class period?

MR. STERLING: Objection. Form.

A. No. I think it might show there is

L. Allen

a difference in what the market is thinking about the future of Halliburton asbestos, but not regarding the alleged misrepresentations and one piece of evidence that supports that finding is that a number of analysts say investors and others are more uncertain and worried about the future, but the asbestos reporting and the information that Halliburton gives, as we discussed earlier, is the same after December 10th as it was previously, so the company reports its next quarters and reports 125 million as its estimated value of current pending claims, to no surprise by the analysts.

Q. I know you've said that on multiple occasions. If we can look at your -- starting on page 104 at the bottom, you have a section on increase on life volatility and you provide charts on a couple of companies, Pfizer, Sealed Air Corp. and Viacom.

Did you calculate the increase over the same period and the implied volatility of all the companies in your asbestos index?

A. No, I did the ones that there were

L. Allen

stories about their increased implied volatility.

Q. Why didn't do you it for your whole asbestos index?

A. I don't see the relevance of doing it for the whole asbestos index, so, I mean, I think -- the point isn't that Halliburton's stock was affected exactly the same amount as every other company with asbestos exposure.

The point is, if what plaintiffs are claiming is this is corrective of the fraud, if this announcement of a verdict is corrective of a fraud and is telling the market about Halliburton's exposure, it -- these other companies are not part of this alleged fraud and you wouldn't expect to see any price reaction from other asbestos defendants because Halliburton has announced a fraud, so it's not that you need to separate did Halliburton's stock price move more or less than other asbestos defendants or did Halliburton's implied volatility go up more or less than other asbestos defendants. That's not -- that, in itself, is not

L. Allen

relevant.

Q. If --

A. In this particular case, not that it couldn't be relevant in some other circumstance.

Q. Insofar as your theory, your opinion that it was an increase in uncertainty and a change in the asbestos litigation climate that was effecting Halliburton and also affected other companies that had asbestos exposure, wouldn't you expect to see an increase in volatility in all the companies in your asbestos index?

A. No, not necessarily, and I think the thing to keep in mind is it's not -- plaintiff's claim is that the Halliburton misrepresented its asbestos liabilities and the truth comes out at the end of the class period and that's why the stock price is reacting.

If other companies are reacting, that's evidence that it's not the truth regarding the fraud, there must be something else and the fact that that something else,

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the uncertainty may effect different companies differently isn't, itself, evidence that to the extent it effects different companies differently, therefore, it must be fraud, that isn't a -- that's not any kind of logical conclusion, so the reaction after this verdict, the majority of analysts covering the company thought the stock price decline of Halliburton stock on December 7th was a large overreaction. They didn't think the stock price reaction made sense, given information that was announced.

The stock price then rebounds substantially on Monday and neither of those pieces of information, including the reaction of other companies, is then consistent with that it could be fraud related.

Q. Why -- have you considered the possibility that the corrective disclosure on December 7th was both a corrective disclosure and was also indicative of changes in the market's view of asbestos liability, so it would have affected other companies, but that part of the effect on Halliburton was from a

L. Allen

corrective disclosure of previously false statements regarding its asbestos liability?

MR. STERLING: Objection. Form.

A. Yes, I've absolutely tried to consider that, so one of the things that -- you say I keep saying it, but I keep saying it because it's responsive to your questions, is, if that were true, then it would make no sense that the company could repeat that the value -- the expected value of their pending asbestos claims, which is what plaintiffs claim is a misleading statement and was corrected by this verdict, is 125 million, and there is no commentary by the analysts covering the stock that they're surprised by that amount, so if this really was corrective, that that prior statement was misleading, it wouldn't make sense that the company could essentially say the same thing again and have a new estimate, which is just essentially the same, and the market wouldn't say, well, now, this is crazy, how could they say this same thing again, we just learned something new.

L. Allen

Q. The market had already affected their price and pushed their price down, so the market doesn't necessarily have to react again.

Let's turn to a different topic.

MR. STERLING: Objection to the sidebar.

Q. On page 108, you mention two adverse verdicts against Honeywell and specifically, its NARCO subsidiary.

Do you know whether or not those adverse verdicts, and you cite a Mealey's report and you cite a Bonart Enterprises article.

Do you know whether either of those articles even mentioned Honeywell?

MR. STERLING: As opposed to NARCO specifically?

MR. GOLDFARB: Yes, David.

A. I don't know if they mention Honeywell specifically.

I do know that Honeywell had asbestos exposure and I do know that it was due to a subsidiary NARCO and I believe I

L. Allen

knew it at this very point in time myself.

Q. NARCO is actually a former subsidiary of Honeywell, it had been spun off some time ago.

A. I believe that's correct.

Q. If the articles did not mention Honeywell and didn't mention NARCO's relationship with Honeywell, would you still expect stock of Honeywell to go down?

A. In general, I expect in an efficient market, if there is sort of money on the table in the billions of dollars, it is worth it to go out there and find out information that might have a multibillion dollar effect, so I believe if a market is efficient and it's possible to determine something like a multibillion dollar market price reaction, I think that kind of information can be determined and I do think it was based on my recollection from work at the time, I do believe it was known that Honeywell had exposure based on its NARCO.

Q. But you don't know whether either of these articles mention Honeywell or just

L. Allen

NARCO? I could show them to you, but in the interest of time, I will continue.

Do you know?

A. I don't know, as I sit here.

Q. You say Dow Chemical did not -- page 110, paragraph 254. It says, Dow Chemical did not report or discuss its asbestos liabilities at all in 2001, right?

A. Yeah.

Q. You say that it's -- the next paragraph, you say, Its liabilities stem from the acquisition of Union Carbide, right?

A. Yes.

Q. You said that there was no mention during the class period of either Dow Chemical or Union Carbide's exposure to asbestos liability, right?

A. Yeah. I think I say how I found that to be the case, so, you know, what kind of a search, that I found no information, correct.

Q. So is it surprising that if there is no discussion of the company's asbestos liability, there is no reports about its

L. Allen

asbestos liability, there is no announced adverse decisions about its liability that its stock price is not moving in concert with other asbestos companies?

A. You know, I think if they have large asbestos exposure and so I think Dow Chemical announced that its value of pending claims at the end of 2001 was 233 million. I think if there is information that effects the stock price and can have a material impact on stock price, I do think investors, in an efficient market, do try to route out that information, so there is an incentive to try to find information that may not be that easily available.

Q. You said that you thought Dow made an announcement at the end of 2001, but paragraph 254, you say, Dow did not report or discuss its asbestos liabilities in 2001, so was your report right or --

A. I think you're wrong or you misunderstood what I just said.

Dow Chemical, and I believe it's in 2002, announced -- so I believe it's in

L. Allen

their, one of their filings in 2002, announced that at the end of 2001, that for year end 2001, their estimated asbestos liabilities was 233 million.

Q. That was an announcement they made in 2002?

A. I believe that's correct, yes.

Q. I would like to ask you some questions about the June 28th alleged corrective disclosure.

Would you consider that announcement a corrective disclosure if plaintiffs alleged that Halliburton knew, before the announcement, that Harbison Walker would seek financial assistance from Halliburton to help it with its asbestos liability?

A. I don't think I would say it was corrective of what plaintiffs allege it's corrective of.

If plaintiff's case is that Halliburton knew that Harbison Walker had already asked or was going to ask for assistance, as I understand it, that would be

L. Allen

different than as I read the complaint and then I guess that could be corrective of that allegation.

Q. Now, you acknowledge that prior to corrective for multiple comparisons, the stock dropped following the June 28th corrective disclosure was statistically significant, right?

A. Yes, I believe that's correct.

Q. Now, what, in your opinion, caused Halliburton's stock -- what, in the announcement on June 28th, caused Halliburton stock to drop?

A. I'm sorry, I was just looking at what I had said.

Q. The question is, what, in your view, caused Halliburton stock to drop on June 28th, what, in the announcement, caused it to drop?

A. One of the things that I say is given the number of dates that are being tested, one would expect that one out of every 20 dates would be statistically significant anyway at a 5 percent level and

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so which is why, given the adjustment for multiple comparisons, this particular date isn't statistically significant, so one potential explanation is this is just -- this is one of those dates that is in the 5 percent that you would expect to see anyway, given the normal movement in the stock price.

What I have looked is what plaintiffs are claiming about this particular day is both that it is an alleged misrepresentation from the company-made statements that allegedly inflated the stock price, as well as a corrective disclosure when, allegedly, part of the truth came out and so I have --

Q. I'm really not asking you what you did.

I'm asking you a specific question, which you are really not answering.

A. I can only answer it to the extent that it is something I looked at that I did.

Q. If you don't have an opinion on it, you can just tell me that as opposed -- I've read what you say about that date, so the

L. Allen

question is --

A. I -- other than what's contained in my report, I don't think I have other further information that would help answer the question that you just asked.

Q. Do you have any opinion -- first of all, do you think that the stock drop -- do you have any opinion as to what caused the stock to drop on June 28th?

A. So one of the things that I did is to see whether I saw any evidence that the stock price was either rising because of the alleged misrepresentations or falling because of the curative disclosures, so do I see any evidence of price impact, and that has been my assignment, and I think I have done an exhaustive look at information on every date that plaintiffs are alleging, including this one, to see if I find any evidence.

Q. I'm asking a slightly different question.

A. In the course of that work, one of the things that I note is that this date, once you take into account the number of

L. Allen
dates the plaintiffs are looking at, is not statistically significant when you do a multiple comparison adjustment, so given the number of dates they look at this, could be one of those 5 percent that you would expect to see at a 5 percent level, so that is one piece of information that has come out from my analysis which is responsive to your question which could be that there really isn't anything out of the ordinary about this date. It's given how many dates are being looked at, you would expect 5 percent of the time that 5 percent of dates would fall into that category and I may have -- I have looked specifically at whether I see information that there is any price impact regarding to the alleged misrepresentations.
Q. Do you have an opinion --
A. And I perhaps have a little discussion about some other information in here and, other than that, I don't have other opinions or findings about that date, but I do think the things that I just said are, in part, responsive.

L. Allen
Q. And to follow-up to your first point, is it your opinion that there is not a statistically significant price drop on that date because of the multiple testing date correction?
A. After adjusting for multiple comparisons --
Q. I know you find it to not be statistically significant, but after adjusting for multiple comparisons, that's what you say in your report, my question to you, based on your work, based on your knowledge of the markets, based on reading Halliburton's press release where they acknowledged a 50 to $60 million potential impact on their asbestos liability that had not previously been disclosed, in your view, was the stock drop caused by that announcement or not or you don't have an opinion?
MR. STERLING: Objection. Form.
A. I've answered that question. So I'm saying that given the number of dates that are looked at and analyzed in this case,

L. Allen
after making a multiple comparison adjustment, there is no statistically significant price reaction, so the -- my findings are consistent with that this date is one of the dates that you would expect to see that are just in the 5 percent that happen in the normal movement of the stock price. I also --
Q. That's the answer to my question.
A. In my report, I have some commentary by the analysts saying, for example, we do not believe Halliburton will be materially impacted by this case, while insignificant, by itself, it does remind people of Halliburton's asbestos liability and could depress its multiple.
We continue to believe asbestos is a virtual nonissue for Halliburton, so there is some analyst commentary that indicates that the analyst does not consider this material and they consider this a nonissue. And I don't think I have further analysis that I have done about the stock price movement on that date.

L. Allen
Q. So you're relying on what the analysts rely about that date, in part?
A. Yes, I am, in part, reporting what the analysts say on that date.
Q. I didn't say reporting. I said relying upon what the analysts say on that date.
A. Well, I don't think my conclusions depend on what the analysts say. My conclusions, in terms of price impact, don't depend on what the analysts say on that day because I'm talking about the price impact of the alleged misrepresentations, but I have relied on and given analyst commentary, which I think is helpful and could be instructive to a factfinder in this case, showing that, so; one, I have the statistical results and; two, I have some commentary that -- that analysts did not consider this significant.
Q. Turning to the August 9th corrective disclosure, you say that no new information -- there was no new information in the 10-Q regarding Halliburton's asbestos reserves or liability for Harbison & Walker

L. Allen

claims? Did you consider the fact that there was information in that 10-Q about the number of claims against Halliburton that had not been previously reported?

A. What do you mean, the number of claims filed?

Q. Yes.

A. No, I didn't particularly consider that because it's not what I -- I guess what I should say, there was no -- what plaintiffs were claiming was corrective about this was the fact that it was a much bigger number than the prior number and I think that was just a misunderstanding about pre and post taxed numbers.

Q. So that's the only thing you looked at in deciding whether there was new information in this 10-Q?

A. No, that's not what I said.

I did look to see whether there was any corrective information about what plaintiffs say was allegedly misleading, so it's not my understanding that plaintiffs were saying the company was improperly

L. Allen

recording or reporting the number of claims filed in each corner, I have no understanding that there is any allegation that the company didn't properly represent that this many new claims had been filed in a quarter.

Q. Would you agree that there is new information in that 10-Q about the number of claims that had been filed against Halliburton and, in fact, there is a sharp increase in the number of claims filed?

A. I would have to look at that and remember whether if this was the first time the company was -- this is the first time I heard plaintiffs, anyone, making the argument that this was corrective because it contained new information regarding the number of claims filed in a quarter, so I don't recall specifically looking at that, but I did look at the number of claims that were filed in every quarter and make note of that.

Q. Did you look at whether or not the 10-Q had new information, any new detail about Halliburton's gross asbestos liability that had not been previously reported?

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A. I did look at what information was new and I did try specifically to look at what information plaintiff's claim was corrective.

I also looked at what the analysts took away as new information from this, so my understanding of what plaintiff's claim was corrective is that the asbestos liability was 124 over twice the 60 million that had been asked earlier, so my focus was on what plaintiffs were alleging, I did, yes, look at --

Q. Do you know whether the analysts commented on the increase in the number of claims being filed against Halliburton?

A. I know they commented on the increased number of claims that were filed, so I know that the first and second quarter showed an increased number of claims and the third and fourth quarter was a decrease in the number of claims and analysts commented both on the increase and they commented on the decrease, so I am aware of them commenting on it.

L. Allen

Q. But at this point, they would have commented on the increase because the third and fourth quarters wouldn't have happened?

A. But I just don't know if the 10-Q is the first time that they -- so, typically, the company -- I don't know if the company actually gave those numbers in a conference call earlier. There are so many dates in this case that -- let me just take a look and see if I have something that might refresh me on this.

Q. I'm going to ask you different question, so you don't have to keep looking for that.

Did you look at how much -- you know that Halliburton, as we've discussed previously, two of its subsidiaries eventually filed for bankruptcy in a prepackaged bankruptcy filing, you know that, right?

A. I don't recall whether -- I think that's correct. I don't recall whether it was a prepackaged bankruptcy filing.

Q. Did you look to see how much it

L. Allen

ultimately cost Halliburton to resolve the pending and future claims filed against it?

A. I did look at what the Rabinowitz forecast was that was announced, maybe six months after the end of the class period.

Q. That's a different issue.

I'm asking if you looked at how much Halliburton, in cash and in stock, ended up paying to resolve its asbestos liability?

A. At various points in time, I certainly have looked at that, as well as how much the insurers paid Halliburton, so I have -- yes, I have looked at those numbers.

Q. Did you look at that in connection with your work in this case?

A. It wasn't information that went directly into my report. Not in preparing my report, no, I don't think so.

Q. If the Halliburton's stock price dropped significantly at the end of December and it rebounds the following day and -- but it is still significantly lower than it was, how do you decide if that's an overreaction, is it relevant to -- strike that. I will ask

L. Allen

a more specific question.

In deciding whether or not the stock drop is an overreaction, is it relevant to look at how much it ultimately cost Halliburton to resolve its asbestos liability?

A. I don't think that would be the -- I don't think that would be relevant in this particular instance.

MR. GOLDFARB: This is probably a good time to take a break because we are going to shift topics.

THE VIDEOGRAPHER: It's 4:50 and we are off the record.

(Recess.)

THE VIDEOGRAPHER: It's 5:18. We are starting disk 6 and we are back on the record.

Q. So I would like to turn to some accounting issues and ask you to turn to page 54 in your report.

If you look at the last sentence in paragraph 113, you see where it says, The rest of the 95 million chart was due to,

L. Allen

quote, negotiations with customers regarding cost increases on seven other projects that had not resulted in resolution of certain claims as originally anticipated, right?

A. Right.

Q. And that's language that the plaintiffs are claiming is a corrective disclosure, you understand that, right?

A. They're claiming this date is a corrective disclosure. I believe plaintiffs and their expert claim that this date was corrective of both the alleged misrepresentations regarding the merger, as well as the alleged misrepresentations regarding the unapproved claims.

Q. Right now, I'm just asking you only about unapproved claims issues, not about merger issues.

If you look just slightly above on this page --

A. I think it's the same announcement that plaintiffs are claiming that is corrective of both, I think.

Q. That's fine, but I'm not asking you

L. Allen

about Dresser issues.

If you look, you see you have the alleged misrepresentation, you have the alleged corrective disclosure on this page and you have basically the language I read, you paraphrased, negotiations with customers that were not resolved as originally anticipated, right?

A. Yes.

Q. So I read you some language and asked if that's what plaintiffs are claiming as a corrective disclosure as to the accounting issue.

Does that refresh your recollection?

A. It's not so much a matter of refreshing my recollection, it's that this date is alleged by plaintiffs to be corrective of two categories of allegations and I don't think plaintiffs are that specific about what about the corrective disclosure is allegedly corrective, so I'm not disagreeing that that sentence that you read might be part of it, I just don't know

L. Allen

if that's -- I don't think plaintiffs have been that specific about which part of it -- which alleged corrective disclosure is actually the corrective part.

Q. The language I read to you, would you agree that that provides some information to the market and tells the market that some revenue on projects that was previously booked is not going to be realized?

A. I'm not sure if that says it was previously booked.

Q. Would you know from your work on this case whether the seven other projects that resulted in -- that did not result in resolution of claims as originally anticipated, do you know whether or not cost overruns or change orders on those projects had been booked as revenue at this point?

A. I believe that's correct.

Q. Didn't the market learn from this press release on December 21st that that revenue was not going to be collected as originally anticipated?

A. I think what it says is that the

L. Allen

negotiations had not resulted in resolution of certain claims as originally anticipated.

Q. So didn't the market learn that some income that was originally anticipated was not going to be collected?

A. That the company had originally anticipated, is that your question, or that the market had originally anticipated?

Q. That the company had originally anticipated.

A. I think it's the revenues that were originally anticipated, wouldn't be collected as anticipated, wouldn't be collected at all.

Q. Isn't that providing new information about -- to the market about revenue that was previously -- strike that.

Isn't that providing new information to the market about whether cost overruns and change orders that were previously booked as revenue are ultimately going to be written off?

A. I don't think it says whether they will ultimately be collected or not. I think it tells the market, the company had

L. Allen

previously expected something and their expectations have changed.

Q. Would you consider that corrective information as to the allegations that the company wasn't properly booking revenue that it knew or should have -- strike that.

Do you consider that a corrective disclosure that the allegations that the company was booking cost overruns as revenue, even though it knew or should have known that it would not be collectable?

A. I don't think that's specifically correct.

So what I understand what the plaintiffs are claiming is that one claim in the company changed their policy without telling the market.

Q. I'm not asking about the change in policy and I would appreciate if you could please stick to what I am asking you about.

I asked you whether it was correct of the allegation that the company was booking cost overruns as revenue even though the company knew or should have known it

L. Allen

wouldn't be able to collect that revenue and whether this is corrective of that alleged misrepresentation?

A. I'm not sure it's corrective. The company was previously booking revenue that it didn't think was probable when booked.

Q. Is that because to be corrective, it would have to acknowledge the revenue was improperly booked in the first place?

A. No, I don't think that's the case. I just don't know that it's correcting -- they're saying that there has been a change in the market that caused them to reevaluate the expected results of their negotiations with customers.

Q. It doesn't -- where does it say there has been a change? It talks about labor disturbances in Venezuela and West Africa that is talking about cost runs over the quarter and that is a separate topic.

A. I would have to look at the actual announcement itself and I do think the commentary of the analysts talks about -- for example, one analyst talks about

L. Allen

relationships with some customers have deteriorated and another said that one could consider these profit adjustments on existing projects to be normal operating events.

Q. But if this is disclosing that revenue that was previously booked, is not going to be collected as anticipated, what is missing for it to be a corrective disclosure, in your view, as to the claim that the company was improperly booking revenue it knew or should have known wouldn't be collected?

A. Could you just repeat the question. I lost focus.

Q. This is disclosing that cost overruns that were booked as revenue are not going to be collected as anticipated.

What is missing for it to be a corrective disclosure, in your view, as to the claim that the company was improperly booking cost overruns as revenue even though it knew or should have known that revenue was not reasonably estimatable and probable of collection?

L. Allen

A. I don't think there is evidence that the market or analysts understands this as -- they believed there has been a change in the environment and that it has made. There is increased fiercely competitive environment and difficult relationships with customers and they attribute that to this.

Q. So do the analysts have to recognize that this is a corrective disclosure for it to be a corrective disclosure?

A. I guess, in general, they don't. It would be possible for something to be a corrective disclosure.

Q. Doesn't this announcement reveal part of the allegedly concealed truth being that the company wasn't going to end up collecting as revenue a lot of the cost overruns it booked as revenue?

A. Well, so then I would have to go back and tell you what I looked at, which are the allegations.

Q. I don't mind you telling me what you looked at if you answer my question and

L. Allen

then can you elaborate.

The question is, doesn't this announcement reveal part of the allegedly concealed truth being that the company wasn't going to end up collecting as revenue some of the cost overruns it booked at revenue? So it's a yes or no and then you can explain.

A. I don't understand that to be the allegedly concealed truth. As I understand the allegedly concealed truth, it's that first the company changed its policy without letting the market know and then it reported its new policy and did not, in fact, abide by the new policy, which was to book claims, unapproved claims on fixed price contracts when they were deemed probable, and it's my understanding that plaintiffs are alleging that that practice was not abided to, so, first, there was a change in the policy which was then announced and then that policy wasn't, in fact, followed.

Q. My question is --

A. So it's not my understanding that plaintiffs are claiming that -- plaintiffs

L. Allen

are claiming that the policy or the lack of disclosure about the policy was misleading.

Q. I want to put aside the disclosure and the change of policy. I'm not asking you about that, so I will put that aside and just focus on the -- what you understand about whether or not the policy was followed or abided by and if the policy is that revenue is only going to be booked when it was reasonable estimatable and probable of collection, that's the accounting policy at issue?

A. I believe that's correct.

Q. Then the question is, why doesn't this announcement reveal part of the allegedly concealed truth and the truth being that the company wasn't going to end up collecting as revenue, cost overruns that it booked as revenue in violation of that accounting policy?

A. I don't think I can separate each -- separate this from the fact that plaintiffs are alleging that this policy itself was announced at some point in time

L. Allen

and -- I don't think I can separate all the information that I know about what plaintiffs are alleging and what happened with the booking of unapproved claims of fixed price contracts throughout the class period, so it's hard to say whether some piece of information, I can ignore everything else and say, can this itself be corrective?

Q. I'm asking you, is this corrective of part of the allegation, and I didn't say corrective, I say, does this reveal part of the allegedly concealed truth? It's yes or no and then can you explain.

A. I don't think that, itself, reveals the allegedly concealed truth which the policy changed without them knowing it and that it was booking claims that were deemed probable.

I think this announcement is saying there are negative changes in the market and we have reevaluated our negotiations on certain claims with certain customers.

Q. So this, again, just focusing on the application of the policy and not the

L. Allen

change of the policy, this is disclosing that revenue, this is disclosing that cost overruns booked under the policy are not going to be collected, but you think it's not a corrective disclosure because the company provides nonculpable reasons, in your view, that the cost overruns are not going to be collected as revenue?

A. I don't think it's a disclosure that the amounts are not going to be collected. I think it's an announcement that the negotiations regarding cost increases were not resulting as originally anticipated, so I don't think it says that the amounts will not be collected.

Q. So it's because of the phrasing, even though as a substantive matter, it reveals that some of the revenue that was booked is not going to be collected, it's because of the wording, the phrasing of the company's announcement that you think it's not a corrective disclosure?

A. No. So you, in your prior question, said the company announced that

L. Allen

these amounts weren't going to be collected and I was saying I didn't agree with that.

Q. I didn't say that. I asked if it was a corrective disclosure of the allegations. I am not categorizing the announcement. The announcement speaks for itself.

I'm asking why, in your view, it's not a corrective disclosure of the alleged misrepresentation being -- the misrepresentation being that the company was improperly booking cost overruns knowing they wouldn't be collected?

A. I don't think this corrects and tells the market that the company had previously been booking revenues when they knew they weren't probable.

Q. And so in this instance, you think a corrective disclosure has to do that to be a corrective disclosure?

A. I don't think it has to do that. I don't see that this is evidence that this is corrective.

Q. Now, the company's press release

L. Allen

reported on a number of different matters, labor disturbances in Venezuela, West Africa, market outlook for E&C business?

Did you attempt to disaggregate the various matters that were disclosed, the pieces of information to determine what did and didn't effect the stock price on this date?

A. I don't think I found there was a stock price reaction on this date at all and I don't believe that plaintiff's expert, Ms. Nettesheim, found a stock price reaction on this date either, so I would disaggregate nothing to find nothing.

Q. Ms. Nettesheim found a statistically significant price movement on this day and the next day. I know you have issues with that, which we will turn to in a second, but I just want to be clear that if I understand correctly, that you didn't attempt to disaggregate, in your view, maybe there is no culpable news, but you didn't attempt to disaggregate the different pieces of news that was disclosed on December 21st on

L. Allen

Halliburton's stock price?

MR. STERLING: Object to the sidebar.

A. Ms. Nettesheim did not find a statistically significant reaction on December 21st.

Q. I didn't say that.

MR. STERLING: You said the 21st.

MS. MILLER: Carl, I think you misspoke.

Q. She did find a statistically significant stock drop over two days.

A. I think she tested the day after, the 22nd. She didn't find a statistically significant drop on the 21st.

Q. And did you attempt to do any disaggregation as to what caused the stock to drop on December 22nd?

A. I do find that after a multiple comparison adjustment, there isn't a statistically significant stock price drop on the 22nd, but I did look at the stock movement on the 22nd and I did find that there is a large volume at the very end of

L. Allen

the trading date on the 22nd and that the Halliburton stock price moves down at the time of this large volume at the end of the 22nd.

I did look at -- I did look to see if I found any news that was released at the time that I saw this very large volume at the end of the day and I didn't particularly see any news, but I did see that one of Halliburton's main competitors, Schlumberger, at the end of the day on the 22nd, moved in the opposite direction, so it went up and I did see some large trades in Schlumberger stock price, so I did look a little bit at what I saw on the 22nd. I didn't see any of it that supported the stock price movement on the end of the day on the 22nd, wasn't any way related to the alleged misrepresentations and I did do some examination into what might be moving the stock price and what was going on.

Q. Did you find any explanation for what caused the stock to drop in the latter part of the day on December 22nd?

L. Allen

A. One of the things that I saw was this large volume at the end of the day and price movement around this time and similar large volume in Schlumberger's stock NA, an opposite reaction, so one hypothesis is that there is someone buying one stock -- switching from one stock to another, for example, selling Halliburton and buying Schlumberger, and it could be some large trades, so that's one thought I had given the --

Q. You don't know that happened, that's just speculation, right?

A. I don't know what happened. I did look to see could I find some sort of explanation for why -- I did look very closely and did not see any evidence whether any price movement in Halliburton was related to the alleged misrepresentations. I did not see any evidence to support that.

I did see that at the very end of the trading day, there was some unusually large volume and the end of the trading day of the 22nd, so almost two trading days after

L. Allen

the announcement, there was some movement in Halliburton and some movement in Schlumberger.

Q. You don't know whether those two movements were linked, correct?

A. I don't.

Q. You looked to see if you could find an explanation as to why Halliburton's stock dropped on December 22nd in the latter part of the day and you didn't find an explanation, right?

A. Well, I didn't find any news stories. One hypothesis is that there are some large trades, another -- and I would also note, as I did on another day that you asked me about that, once you do a multiple comparisons adjustment, there is no statistically significant movement on December 22nd and I guess what I should note is sort of, moreover, I did a multiple comparison adjustment using only the 35 days, but, really, given that Ms. Nettesheim's approach, there is no reason at all to think that December 22nd was related to the alleged

L. Allen

misrepresentation. She had no reliable support to her claim, so I think a more reasonable multiple comparisons approach for that particular date would probably be using the 633 days that she did where she tested every single day during the class period, so this just looks like it's the result of excessive cherry picking.
Q. Did you provide intraday data on Schlumberger as part of the materials you considered?
A. I don't know. I think I provided -- do I have a chart on the Halliburton intraday on this day?
Q. You do have Halliburton --
A. I'm not sure.
Q. Now, in footnote 122, you say, It's possible that industry-related information effected Halliburton's stock more than other companies in the same industry.
Do you have any evidence that that happened or just that that's a possibility?
A. What page are you on?
Q. 122, page 54.

L. Allen

A. Yeah. So one of the things that I did notice in the analyst reports is they do say that Halliburton has more affected than a number of their competitors to international markets, for example, so I think Baker Hughes is one of their competitors in the energy services field, and I think they have much less of an international presence than -- so, yes, I did see discussion that certain types of industry effects were expected to effect Halliburton more than others and I recall seeing those kinds of comments throughout the class period.
Q. Did you do any testing of that or you just saw that in analyst reports, any testing to confirm whether that was the case?
A. I didn't particularly test whether that was the case, no.
Q. Now, leaving for a second this case and talking in general about your work in securities cases, have you sometimes used the two-day window when you are doing event studies?
A. So my general practice is to do a

L. Allen

one-day event window and if I see a statistically significant reaction on that one day and no intervening news, then I'll carry that price reaction out another day, if there is not some other intervening news, so my general practice is to do one-day reactions, but to continue the reaction, to the extent I see that the market is continuing to react in a statistically significant manner.
Q. I'm not asking you about your general practice. I'm asking you if you have sometimes used a two-day window. Strike that. I will withdraw that question.
You gave an example where you do use a two-day window if you see a price reaction continuing.
Do you remember the In Re: Lawrence Group, Inc. versus Bartons case?
A. I think I do.
Q. Do you remember whether you used a two-day window in this case?
A. I don't recall. I wouldn't say I've never used a two-day window. I would

L. Allen

say my general practice is to do a one-day window and to carry a -- continue a price reaction if it's statistically significant.
Q. Do you remember, I can show you your report if need be, that you reached a conclusion in that case based, in part, on the fact could you say with 90 percent confidence that on the day of the information was released, the movement in the stock price was not caused by chance and on the day before the release, when there might have been information leaked, you could say with 99 percent confidence that the movement was not caused by chance, do you remember that?
A. I don't know that I would use those same -- those kind of terms.
I do recall that there might have been a price reaction that was statistically significant at a high level the day before and a price reaction that was statistically significant at a 90 percent level on the day that news was released, that I found public information that news was released.
Q. And over those two days, could you

L. Allen

say with 95 percent confidence that there was a statistically significant impact, correct?

A. I wouldn't say with 90 percent confidence, I don't know that's how I would have described it. I would have given the results, so as you are describing it, that sounds like a case where there was a large -- there was a statistically significant price reaction the day prior to some sort of public announcement of news and not as much of a reaction on the day that news was announced.

What Ms. Nettesheim --

Q. I'm asking you about what you did in that case.

A. Uh-huh.

Q. Over those two days, do you remember? Do you remember what you found over those two days?

A. I don't recall. I might have looked over the two days, given that the announcement happened the one day and I'm seeing a large price reaction the day before an announcement.

MR. GOLDFARB: If we could just go

L. Allen

off the record for a second so I can find the right part of it.

THE VIDEOGRAPHER: It's 5:56 and we are off the record.

(Off the record.)

THE VIDEOGRAPHER: It's 5:57. We are back on the record.

Q. I will show you what I'm marking as Exhibit 2, which is your deposition testimony from September 2008 in a case In Re: Barbara Lawrence, debtor versus Barton. I flagged and highlighted a page in this to expedite things and I will give your counsel a copy with the same passage highlighted?

(Allen Exhibit 2, Lucy Allen's deposition testimony from September 2008 in the case In Re: Lawrence Group, Inc. versus Barton, et al., marked for identification.)

Q. Do you remember giving testimony in this case?

A. I don't recall this, giving this deposition, no.

Q. I'm going to read you a few

L. Allen

questions and answers then to refresh your recollection.

Before the break, Ms. Allen, you indicated that the standard for statistical significance was at the 95 percent level. In your report here, you use 90 percent. Why?

Answer: I don't use 90 percent in my report, a level October 21st that's 90 percent.

Okay, so I'm not saying the 90 percent is the standard. I think the most common standard is a 95 percent level and I think the movement on October 20th and the movement on October 20th and 21st combined with the statistical significant at the 95th percent level, no matter what the index or how you control for peers or market.

Do you see that?

A. I see it.

Q. Is that accurate testimony that you gave at that time in this case, to the best of your knowledge?

A. I don't think so. I just don't -- this might be -- I don't believe this has

L. Allen

corrected -- it just doesn't sound like what I would say exactly, so I don't think these exact words -- perhaps I had some correction to this testimony, so, for example, the first answer that you read, doesn't seem to make exact sense to me.

Q. You don't know you had corrections, you are saying you might have submitted an errata?

A. If I was given my deposition transcript and I reviewed this, I believe I would have submitted an errata.

Q. Is it fair to say that in this case, you found; A, you use a two-day window and; B, found that something was statistically significant because over those two days combined, the price movement could be -- was statistically significant at the 95 percent level?

A. I don't think that's what this says. This says, 90 percent is the standard, I think the most common standard is a 95 percent level and this says, I think the movement would be statistically significant

L. Allen
at the 95 percent level, no matter what index or how you control for peers or market.
Q. That's over the two days, one day is 90 percent, one day is 99 percent, over the two days, it's 95 percent. Was that not what you found in this case?
A. I don't know if that's what I found. This says, I think the movement would be statistically significant.
Q. I'm going to show you now what I am marking as Exhibit 3, which is your expert report in this case.
MR. STERLING: "This case" being?
MR. GOLDFARB: The same case we are talking about, In Re: Lawrence.
Q. I believe you did two expert reports, this is the one in 2003 and it's open to page 3. If you could look at the bottom paragraph on that page, please.
(Allen Exhibit 3, Expert Report of Lucy P. Allen, In Re: Lawrence Group, Inc. versus Barton, et al., marked for identification.)
Q. Here, it says, defendants say --

L. Allen
would you read the paragraph at the very bottom of the page?
MR. STERLING: Which page?
MR. GOLDFARB: Page 3.
Q. Could you read in the record, The defendants claim that the increase.
A. Defendants claim that the increase in the claim of MTI stock was not attributable to the announcement of the ADL demonstration. The earliest story we find reporting on the ADL demonstration is at 8:00 a.m. on October 21, 1997. After controlling for movement in an index of peer companies, we find a statistically significant positive reaction on October 21st at the 90 percent significance level. In addition, we find a statistically significant market adjusted stock return at the 99 percent level on October 20th, the date preceding the announcement. See Exhibit 3.
Q. That's enough.
If you look at this, can you confirm that this is an expert report you prepared in this case?

L. Allen
A. No, I cannot.
Q. If you look at the front page of it, that's available on West Law, it says, Expert Report of Lucy P. Allen, In Re: Lawrence Group, Inc. versus Barton, et al.?
A. I see that. This isn't the format or the look of what a report of mine would have, so if this is my report, it just wouldn't have looked like this as I put it together.
Q. This is -- I will represent this is the form it takes when you print it off West Law.
Do you have any reason to think this is not your report or an accurate copy of your report given, even though the format might look a little different?
A. I don't know. I would have to look at it. I'm just saying -- just from -- it's just not the look of a report that I would do.
Q. Do you have any reason to think what you read out loud is not what you wrote in an expert report in this case at that

L. Allen
time?
A. I don't have a specific reason, no.
Q. Do your colleagues at NERA sometimes use two-day reports?
MR. STERLING: You mean two-day windows?
MR. GOLDFARB: Thank you.
Q. In doing event studies, do your colleagues at NERA sometimes use two-day windows?
A. As a general approach, as I generally described, and I believe that same approach is followed by my colleagues and I don't --
Q. I'm going to show you what I have marked as Exhibit 4, Allen Exhibit 4, which is a study by David Tabak and Frederick Dunbar, Materiality of Magnitude Event Studies in the Courtroom.
(Allen Exhibit 4, study by David Tabak and Frederick Dunbar, Materiality of Magnitude Event Studies in the Courtroom, marked for identification.)
Q. I would like to ask you to -- do

L. Allen
you see on page 7, under B, there is a few paragraphs under the event window and if you look at the top of page 8, you see it says, In securities fraud cases, many experts have adopted the convention of looking at one, two or five-day periods following an announcement. The most recent academic announcements express support for the shorter one or two-day window, although it recognizes that, in practice, longer windows are often used, is that correct? Did I read that correctly?
A. Yes.
Q. And is Mr. Tabak one of the people who you said was -- I don't remember the terminology, independent reviewer or outside reviewer of your report in this case?
A. That's correct.
Q. And I believe he is also the person you cited to when you were referencing a decision to use one type of correction for multiple event testing as opposed to another, right?
A. Correct.

L. Allen
Q. Now, you say that -- talking about the December 21st and 22nd days, you say, The allegation that the market did not react to a piece of news for almost two full trading days and then reacted to it is inconsistent with the conclusion that Halliburton stock traded in an efficient market, right? Do you say that on page 59 of your report?
A. Yes, I believe that's correct.
Q. Now, if you look at page 44 of your report, and you look at December 21st and December 22nd on page 44, there is a chart?
A. Yes.
Q. The stock does go down somewhat on December 21st, does it not, and then experiences a larger drop later in the day on December 22nd, the following day in the afternoon?
A. I'm sorry, what are you saying? The stock does what?
Q. Goes down some on December 21st and goes down more in the afternoon of the 22nd?
A. The movement on December 21st, according to my event study, as well as

L. Allen
plaintiff's expert, Ms. Nettesheim's, event study, there is no statistically significant price reaction on December 21st.
Q. I didn't ask you if there was a statistically significant price reaction.
I asked whether this chart shows that the stock went down on December 21st and went down more on December 22nd?
A. I don't know that that's what I see. The stock moves around a little bit on December 21st. I have done a statistical test of whether the stock price is moving in a statistically significant manner on September 21st, as has plaintiff's expert, Ms. Nettesheim, and neither of us has found that the stock price is statistically significant.
MR. GOLDFARB: I would like to go off the record.
THE VIDEOGRAPHER: It's 6:09. We are off the record.
(Recess.)
THE VIDEOGRAPHER: It's now 6:21 and we are back on the record.

L. Allen
Q. Ms. Nettesheim -- my apologies -- Ms. Allen, in any other case, have you looked at regression for the year following the class period to draw any instances about what happened during the class period?
A. Yes, I believe so, but as I sit here, it wouldn't come to mind specifically.
Q. So you believe so, but you can't name a case in which you have done that?
A. That's right, I couldn't classify cases in my mind by that particular aspect, so I do believe I have done that, but I can't, as I sit here, think when.
Q. Can you describe anything about any case in which you would have done that?
A. I don't have a specific recollection. I mean, I can't think I -- I would believe I would have done that, I don't have any specific case, does not come to mind.
Q. I'm not asking you what you believe you would have done. I'm not asking you what you have a specific recollection of.
I'm asking, as you sit here, can

L. Allen

you identify any case in which you have done that, even if you can't remember the name of the case?

A. I don't have a specific recollection. My belief is that I would have done it, but I can't recall a specific instance, though.

Q. Have you ever, in any other case, looked at the volatility of other companies to make inferences about what effect did the stock price of a different company?

MR. STERLING: Do you mean applied volatility?

MR. GOLDFARB: Yes. Thank you.

A. I believe so.

Q. Can you identify any case in which you've done that?

A. Not that I can specifically recall, no.

Q. Can you identify any textbook, case or other authority that endorses the methodology that you've used in this case in drawing your conclusion that none of the alleged corrective disclosures affected the

L. Allen

Halliburton stock price?

A. Sure. I could point to academic authorities that use methods that I am describing or whose methodologies and findings are consistent with the approaches that I have taken here.

Q. Can you give me an example of an academic authority and tell me which of the methodologies it is consistent with?

A. Well, I mean, this is -- for example, one of the things --

Q. In the interest of time, I will rephrase the question.

Can you think of any academic authority that supports the use of a regression after the class period to make inferences about what happened during the class period?

A. This paper that you've talked about, when you talk about academic authorities and you are talking about a class period, it would have to be an academic authority that's talking about an event study in a legal context, rather than in another

L. Allen

sort of finance or academic context because there would not be a class period, except in a legal context, sure, there have been articles talking about event studies that describe different periods, this may be one, this may make --

Q. That talk about using a post -- a period for a year after the event in question to do a regression and then draw inferences on what happened to the day or days prior to that year?

A. Yeah. So, for example, sure. For one, I'm not sure that's what I've actually done in this case. I'm not sure why you are asking that question, but, yes, I think there are a number of articles that I have seen that have discussed that -- the period over which the regression is run can be a period before a class period, can be a period during the class period and sometimes be a period after a class period.

Q. Separate question. In the situation where you have a divergence between the market reaction to a piece of news and a

L. Allen

stock analyst's reaction to a piece of news, how do you decide if the market is right or the analysts are right?

MR. STERLING: Objection. Form.

A. I don't think that's a fully developed question or hypothetical, so I'm not sure how to answer that.

Q. There can be more, obviously, specifics in the hypothetical, but if a stock price, say, goes significantly down and the analysts say that's an overreaction, how do you decide if the analyst is right, that it's an overreaction or the market is right? What kind of things would you look for?

A. Regarding an overreaction?

Q. An alleged overreaction.

A. Well, there are a number of things. One way to look at an overreaction is if there is a later correction, so if the market goes down a lot and then rebound, that, in itself, would be generally consistent with an overreaction. That might be one piece of evidence.

What some of the academic

L. Allen

literature does in terms of -- so there is some academic literature on market efficient that looks at whether the market consistently overreacts and one of the things is that --

Q. Besides a rebound, what, if anything, else would you look at to determine whether or not the market is overreacting or the analysts are wrong? If the analysts are saying it's an overreaction, you could look to see if the market rebounds. What, if anything, else would you look to?

A. Well, we would have to think more about what your question is. What do you mean, the analysts are wrong? So I guess we would have to say, what do you mean by an overreaction?

Q. An overreaction, the analysts are saying that the stock price drop was not justified, the market overreacted to some news, I'm trying to get, in your view, how do you decide who is right, the analyst or the market?

A. I don't think that's a question that I'm particularly looking at here and I

L. Allen

would have to understand what you mean by who is right.

Oftentimes, it's important to know what the analysts, in general, are thinking. Is this different than what their expectations were and if they're saying that the market reacted differently than their expectations, that, in itself, can be information that can be important, depending on what your question, your study.

Q. As you sit here, can you think if there is anything else you would look at besides a rebound that you would look at?

A. To answer what question? Your question doesn't make sense to me.

Q. To determine whether the market has overreacted to a piece of news when the stock price has gone down, besides seeing if there is a rebound, can you think of, as you sit here, anything else you would look at to determine whether the market got it right or the analyst got it right?

A. Well, I don't know what you mean by the market got it right or the analyst got it

L. Allen

right, but one of the -- one type of information one can look at to see if a market is overreacting is whether analysts who were studying the stock think that the market overreacted.

Another type of analysis one could do to analyze whether there is stock overreacted is to see when similar information is announced, is there the same reaction or is this reaction bigger or different than what had other times happened when the same information was announced. There are other types of analyses where some of which the analysts are doing in this case, were to take the actual market reaction in terms of a dollar amount and look at the information that's being announced and saying, how big an effect would this information have to be from a valuation standpoint in order to justify that kind of market price reaction, so you can do some sort of ground up valuation analysis of the specific components of an announcement to see if the market reaction makes sense from a

L. Allen

valuation standpoint.

Q. Would you also look at the long-term reaction of the stock price?

MR. STERLING: That was the last question.

MR. GOLDFARB: That's fine.

A. I'm sorry?

Q. Would you also look at the long-term reaction of the stock price?

A. The long-term reaction of the stock price, what do you mean by that?

Q. What happens in the weeks and months following the alleged overreaction?

A. If you are just talking about one company's stock price, I think perhaps you can do that, yes. I think that may be more difficult if there is more information coming out, so I think some of the academic articles do that. If you do a whole cross section of companies, if you look at a whole bunch of companies, it may be easier to look over a longer time period because you can think that individual things that might effect one company might not -- might sort of come out

L. Allen

in the wash when you are looking at a whole bunch of companies at one time. I think looking over a longer time period for one individual company, it can be a little harder to make a determination or I'm not sure what you would do with that. You would see the stock prices going up or down or whatever or mature over a longer time period, how much easier it would be to come to some conclusion, but that would be something you could look at.

MR. GOLDFARB: I think I'm out of time. No more questions.

THE VIDEOGRAPHER: The time is 6:36 p.m.

(Time noted: 6:36 p.m.)

I N D E X

E X H I B I T S

DEPOSITION SUPPORT INDEX

Direction to Witness Not to Answer

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None

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None

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None

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None

CERTIFICATE

I HEREBY CERTIFY that the witness, LUCY ALLEN, was duly sworn by me and that the deposition is a true record of the testimony given by the witness.

____

Leslie Fagin,
Registered Professional Reporter
Dated: September 22, 2014

(The foregoing certification of this transcript does not apply to any reproduction of the same by any means, unless under the direct control and/or supervision of the certifying reporter.)

ACKNOWLEDGMENT OF DEPONENT

I, , do hereby certify that I have read the foregoing pages, and that the same is a correct transcription of the answers given by me to the questions therein propounded, except for the corrections or changes in form or substance, if any, noted in the attached Errata Sheet.

LUCY ALLEN DATE

Subscribed and sworn to before me this day of , 2014.

My commission expires:

Notary Public

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E R R A T A

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PAGE LINE CHANGE

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FORM 10-Q

HALLIBURTON CO - HAL

Filed: May 11, 2001 (period: March 31, 2001)

Quarterly report which provides a continuing view of a company's financial position

In addition, as of March 31, 2001, we have recorded accounts receivable we expect to collect from Highlands Insurance Company of $14 million for payments we already have made on asbestos claims. If our appeal of the Chancery Court's ruling in the Highlands litigation is unsuccessful, we will be unable to collect this $14 million as well as the $40 million estimated recovery from Highlands. This may have a material adverse impact on the results of our operations and our financial position at that time.

Accounts receivable for billings to other insurance carriers for payments made on asbestos claims were $10 million at March 31, 2001 and $13 million at December 31, 2000.

We recognize the uncertainties of asbestos litigation and the possibility that a series of adverse court rulings or new legislation affecting the asbestos claims litigation or settlement process could materially impact our expected resolution of asbestos claims. However, based upon:

- our historical experience with similar claims;
- the time elapsed since Dresser and its former divisions or subsidiaries discontinued sale of products containing asbestos;
- the time elapsed since Kellogg Brown & Root used materials containing asbestos in any construction process;
- our understanding of the facts and circumstances that gave rise to asbestos claims; and
- our estimate of amounts we will recover from insurance companies,

we believe that the open asbestos claims asserted against us will be resolved without a material adverse effect on our financial position or results of operations.

Fort Ord litigation. Brown & Root Services, now operating as Kellogg Brown & Root, is a defendant in civil litigation pending in federal court in Sacramento, California. The lawsuit alleges that Brown & Root Services violated provisions of the False Claims Act while performing work for the United States Army at Fort Ord in California. This lawsuit was filed by a former employee in 1997. Brown & Root Services has denied the allegations and is preparing to defend itself at trial. Further proceedings in this civil lawsuit have been stayed while the investigation referred to in the next paragraph is ongoing. We believe that it is remote that this civil litigation will result in any material amount of damages being assessed against us, although the cost of our defense could well exceed $1 million before the matter is brought to a conclusion.

Although in 1998 the United States Department of Justice declined to join this litigation, it has advised us that Brown & Root Services is the target of a federal grand jury investigation regarding the contract administration issues raised in the civil litigation. Brown & Root Services has been served with grand jury subpoenas, which required the production of documents relating to the Fort Ord contract and similar contracts at other locations. We have also been informed that several current and former employees will be called to testify before the grand jury. We have retained independent counsel for these employees. We are cooperating in this investigation. The United States Department of Justice has not made any specific allegations against Brown & Root Services.

Environmental. We are subject to numerous environmental legal and regulatory requirements related to our operations worldwide. We take a proactive approach to evaluating and addressing the environmental impact of our operations. Each year we assess and remediate contaminated properties in order to avoid future liabilities and comply with legal and regulatory requirements. On occasion we are involved in specific environmental litigation and claims, including the clean-up of properties we own or have operated as well as efforts to meet or correct compliance-related matters.

Some of our subsidiaries and former operating entities are involved as a potentially responsible party or PRP in remedial activities to clean-up several "Superfund" sites under United States federal law and comparable state laws. Kellogg Brown & Root is one of nine PRP's named at the Tri-State Mining District "Superfund" Site, also known as the Jasper County "Superfund" Site. Based on our negotiations with federal regulatory authorities and our evaluation of our responsibility for remediation at small portions of this site, we do not believe we will be compelled to make expenditures which will have a material adverse effect on our financial position or results of operations. However, the United States Department of the Interior and the State of Missouri have indicated that they might make a separate claim against Kellogg Brown & Root for natural resource damages. Discussions with them have not been concluded and we are unable to make a judgement about the amount of damages they may seek.

FORM 10-K

HALLIBURTON CO - HAL

Filed: March 12, 2002 (period: December 31, 2001)

Annual report which provides a comprehensive overview of the company for the past year

We manage asbestos claims to achieve settlements of valid claims for reasonable amounts. When that is not possible, we contest claims in court. Since 1976 we have closed approximately 200,500 claims through settlements and court proceedings at a total cost of approximately $150 million. We have received or expect to receive from our insurers all but approximately $40 million of this cost, resulting in an average net cost per closed claim of less than $200.

Reserves for asbestos claims. We have accrued reserves for our estimate of our liability for known open asbestos claims. We have not accrued reserves for unknown claims that may be filed against us in the future. Our estimate of the cost of resolving open claims is based on our historical litigation experience on closed claims, completed settlements and our estimate of amounts we will recover from insurance companies. Our estimate of recoveries from insurance companies with which we have coverage-in-place agreements is based on those agreements. In those instances in which agreements are still in negotiation or in litigation, our estimate is based on our expectation of our ultimate recovery from insurance companies. We believe that the insurance companies with which we have signed agreements will be able to meet their obligations under these agreements for the amounts due to us. A summary of our reserves for open claims and corresponding insurance recoveries is as follows:

	December 31			
Millions of dollars	2001		2000	
Asbestos litigation claims	$	737	$	80
Estimated insurance recoveries:				
Highlands Insurance Company		(45)		(39)
Other insurance carriers		(567)		(12)
Insurance for asbestos litigation claims		(612)		(51)
Net liability for known open asbestos claims	$	125	$	29

These insurance receivables and reserves are included in noncurrent assets and liabilities due to the extended time periods involved to settle claims.

In addition to these asbestos reserves, our accounts receivable include $35 million we expect to collect from Highlands Insurance Company for settlements and defense costs we have already incurred for construction asbestos claims. If we are ultimately unsuccessful in the Highlands litigation, we will be unable to collect this $35 million as well as the $45 million estimated recovery from Highlands included in our asbestos reserves summarized above. If this occurs, it may have a material adverse impact on the results of our operations and our financial position at that time.

Accounts receivable for billings to other insurance companies for payments made on asbestos claims were $18 million at December 31, 2001 and $13 million at December 31, 2000.

We have not accrued reserves for unknown claims that may be asserted against us in the future. We have not had sufficient information to make a reasonable estimate of future claims. However, we recently retained a leading claim evaluation firm to assist us in making an estimate of our potential liability for asbestos claims that may be asserted against us in the future. When the evaluation firm's analysis is completed it is likely that we will accrue a material liability for future claims that may be asserted against us. We expect the analysis will be completed during the second quarter of 2002 and that we will accrue the liability at the end of the quarter. At the same time we will accrue a receivable for related insurance proceeds we expect to collect when future claims are actually paid.

The uncertainties of asbestos claim litigation and resolution of the litigation with insurance companies described above make it difficult to accurately predict the results of the ultimate resolution of asbestos claims. That uncertainty is increased by the possibility of adverse court rulings or new legislation affecting asbestos claim litigation or the settlement process. Subject to these uncertainties and based on our experience defending asbestos claims and our estimate of amounts we will recover from insurance, we believe that the open asbestos claims pending against us will be resolved without a material adverse effect on our financial position or the results of our operations.

Fort Ord litigation. Brown & Root Services, now operating as Kellogg Brown & Root, has been a defendant in civil litigation pending in federal court in Sacramento, California. The lawsuit alleges that Brown & Root Services violated provisions of the False Claims Act while performing work for the United States Army at Fort Ord in California. This lawsuit was filed by a former employee in 1997. On February 8, 2002, this lawsuit and a related grand jury investigation

Merrill Lynch

FlashNote

United States
Oil Services

4 December 2001

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First Vice President
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Mike Clark, CFA, CPA
Assistant Vice President
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Halliburton Co

Shares Underperforming Again As Asbestos Issues Flare

Reason for Report: Asbestos Related Judgements

Company

HAL; $21.23; C-2-1-7

Reported EPS (Dec): 2000A $0.59; 2001E $1.27; 2002E $1.10

- **An Orange, TX court entered a $65 ml. asbestos judgement against HAL's Dresser subsidiary affirming a September 2001 verdict.**
- **This is $13 million per plaintiff.**
- **In another case, the same court entered three additional judgements against Dresser totaling $35.7 million in favor of 100 other asbestos plaintiffs.**
- **This equals $357,000 per plaintiff.**
- **These cases follow a separate October 26th verdict in Mississippi against three companies including HAL for a total of $150 million.**
- **HAL's share of the verdict is $21.25 ml. or about $10.5 ml. per plaintiff.**
- **The potential cost of these claims is much higher than HAL's historical rate of $758/claim.**
- **HAL is vigorously appealing these judgements and verdict; HAL's insurers cover its litigation costs.**
- **The appeal process could take 16 to 20 months; the judgement on the Mississippi verdict could be entered within weeks.**
- **These three cases highlight the risk of relying on historical settlement rates for projecting HAL's potential future liability.**
- **New entrants into the asbestos litigation industry have upset administrative or rate-based settlements and are now more aggressively recruiting potential claimants and pushing for higher settlement amounts in court.**
- **HAL is facing 147,000 unsettled claims (up 110% from the end of 1998) and its former Harbison-Walker subsidiary, which has sued HAL for financial and administrative assistance, faces about 182,000 claims (about $6,5000/claim historical settlement rate).**
- **At this point, we do not believe that HAL's ultimate asbestos liability will be crippling financially, but we reiterate our position that HAL is likely to repeat its pattern of underperforming as asbestos information is released even with the $10 asbestos discount already priced into the stock.**
- **We believe that the appeals will be a critical test of HAL's defenses and that the outcome will be a critical event for the stock.**
- **In the meantime, the 16 to 20 month process may overhang the stock.**
- **However, we are maintaining our Accumulate/Buy based on HAL's improving fundamental performance.**

Opinion Key [X-a-b-c]: Investment Risk Rating(X): A - Low, B - Average, C - Above Average, D - High. Appreciation Potential Rating (a: Int. Term - 0-12 mo.; b: Long Term - >1 yr.): 1 - Buy, 2 - Accumulate, 3 - Neutral, 4 - Reduce, 5 - Sell, 6 - No Rating. Income Rating(c): 7 - Same/Higher, 8 - Same/Lower, 9 - No Cash Dividend.

JEFFERIES

Oil Service Group **Update – December 7, 2001**

Asit K. Sen, CFA (212) 284-2167 asen@jefco.com Ken Geren (212) 284-2176 kgeren@jefco.com

Halliburton Company

NYSE: HAL - $14.10*

Rating: Accumulate

			2000	2001E	2002E	2003E
52-Week Range	$55.19-$13.02					
Average Daily Vol (000)	3,740	1Q	$0.06	$0.20	$0.29	$0.37
Shares Out --FD (MM)	429.8	2Q	0.12	0.33	0.28	0.38
Equity Market Cap (MM)	6,060	3Q	0.17	0.42	0.32	0.39
Institutional Holdings	82%	4Q	0.22	0.32	0.36	0.40
Insider Holdings	1%	EPS	$0.56	$1.28	$1.25	$1.55
Debt to Total Capital	28%	P/E	25.0x	11.0x	11.3x	9.1x
Book Val/Share	10.42	CFPS	$1.74	$2.51	$2.55	$2.85
Revenue (2001)	13,102	EBDADT/Sh	$2.46	$3.73	$3.64	$4.13
* intra-day price 12/07/01		($MM), except per share data.				

Halliburton: Update On Asbestos Litigation; Stay Cautious

- We have remained cautious on Halliburton for two main reasons: 1) uncertainty surrounding ongoing asbestos litigation, and 2) near-term earnings risk.
- This morning Halliburton indicated that a Baltimore jury has awarded $30 million in damages against its Dresser subsidiary. This follows two recent significant adverse verdicts against the company.
- These are surprising developments following management's rather positive asbestos update during its 3Q01 conference call on October 23. During the conference call management had provided further assurances that current reserves are adequate to cover projected asbestos liabilities.
- We now believe that HAL's asbestos-related net liabilities could be significantly higher than currently estimated (estimated at $125 million by the company).
- We continue to remain cautious on the stock. Our rating is under review (with a negative bias) pending further update from management on asbestos.

Surprising Asbestos Developments

This morning in an 8-K filing, Halliburton indicated that a jury in Baltimore has awarded a $30 million judgment against its Dresser Industries subsidiary. This follows two recent significant adverse verdicts.

On November 29, 2001, a Texas district court entered a judgment against Dresser for a $65 million jury verdict rendered in September in favor of five plaintiffs. The same district court also entered three additional judgments against Dresser in the aggregate amount of $35.7 million in favor of 100 other asbestos plaintiffs. On October 26, a verdict was rendered against the company by a jury in Holmes County, Mississippi, for $21.5 million (net to HAL). In each case management strongly believes the trial courts committed numerous errors in determining their verdicts. We believe Halliburton will appeal each judgment, a process that could be prolonged.

Clearly, these are surprising developments following management's rather positive asbestos update during its 3Q01 conference call on October 23. During the conference call management had provided further assurances that current reserves are adequate to cover projected asbestos liabilities. However, we now believe that the net asbestos liability reserves of $125 at the end of 3Q01 (gross liability $704) probably need to be increased.

Halliburton Asbestos History

Since 1976, Halliburton and its subsidiaries have been defending numerous lawsuits in which it is alleged that some manufactured products contained asbestos and, as a result, individual plaintiffs were injured through inhalation of asbestos fibers. Since 1976, of the 340,000 asbestos claims filed against the company about 193,000 have been settled at a net cost of $38 million (gross cost of $143 million, with insurers paying or expected to pay about $105 million).

The company estimates its gross liabilities at $704 million as of September 30, 2001, and expects to recover $579 million from its insurers (net liability of $125 million). As of September 30, the company faced 146,000 open asbestos claims, plus 120,000 cases brought against Harbison-Walker, that also name Dresser as a defendant. Dresser spun off Harbison-Walker in 1992 before being acquired by Halliburton in 1998.

Earnings Risk

We continue to believe that Street expectations for HAL's 4Q01 and 2002 earnings are too high. Our 4Q01 EPS estimate is $0.32 (Street $0.35). Our 2002 estimate is $1.25, the high-end of a $1.15-$1.25 range (Street $1.33)

PNC ADVISORS
The Thinking Behind The Money.

EQUITY ALERT

Rating Change

December 7, 2001

HALLIBURTON COMPANY (HAL)

Halliburton filed an 8-k with the Securities & Exchange Commission disclosing a judgment against its Dresser Industries subsidiary relating to asbestos litigation. We are downgrading our rating on the shares from Outperform (O) to Market Perform (M). We are maintaining our earnings estimates for 2001 and 2002 at $1.40 and $1.45. We are also maintaining our long-term earnings growth rate of 15%.

Halliburton disclosed that on December 5 a jury in Baltimore, Maryland, returned a verdict against its Dresser Industries subsidiary and other defendants relating to asbestos claims. Dresser's portion of the verdict awarded to the five plaintiffs totaled $30 million. Halliburton attends to challenge the judgments via a post-trial motion, and if unsuccessful to "pursue an appeal aggressively."

The company has reserved $704 million ($125 million net of insurance recoveries) for asbestos litigation claims. Based on the company's claim settlement history (194,000 claims settled since 1976 at an average net cost per resolved claim of less than $200) and the number of open claims at the end of the third quarter (146,000), this reserve seemed more than adequate. However, with the recent high levels of the judgments against the company (approximately $3 million per claim before insurance recoveries), we are concerned that this number may prove to be low.

Over the past two months Halliburton has had more than $150 million in judgments against it, reversing the positive trend we had seen regarding its asbestos liability in the third quarter (during which asbestos claims dropped over 50% sequentially). The company believes that it has strong legal grounds on which to expect reversals of these judgments on appeal. Unfortunately, we believe it may take years before these appeals are resolved and that the fear of additional judgments against the company will make it difficult for the stock to significantly appreciate from current levels. Therefore, because of the acceleration of negative judgments and the length of potential appeal processes, we are downgrading our rating on the shares to Market Perform. We would look to gain exposure to the oil service sector through Baker Hughes (despite its higher valuation) due to the pure-play nature of its business.

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(BCP)
Additional information available on request

Market Capitalization (millions)	9438.0		Rating:		Market Perform M
ENERGY EQUIPMENT & SERVICES	ENERGY			Sector Rating:	U
Price:	$14.00		52-Wk Range	49-19	
	EPS	P/E	Relative P/E	Dividend	
2000	$0.64	21.9	0.95	Annual	$0.50
2001E	$1.40	10.0	0.38	Yield	2.3%
2002E	$1.45	9.7	0.42	Hist. 5-Yr Gr.	0.0%
5-Yr Proj. Gr.	15.0%				
5-Yr Hist. Avg.		25.0	1.3	Price/Book	2.05
5-Yr Range		19x - 32x	1.1x - 1.6x	Fiscal Year End	Dec

PNC Advisors, 1600 Market Street, Philadelphia, PA 19103, 215-585-6688.

SALOMON SMITH BARNEY

Target Price Change ☑
Rating Change ☑

Halliburton Company (HAL)#

HAL: Downgrading on Mounting Asbestos Liabilities

3H *(Neutral, High Risk)*
Mkt Cap: **$8,965.5 mil.**

United States

December 7, 2001

OILFIELD EQUIPMENT & SERVICES

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SUMMARY

- We are downgrading Halliburton to 3H from 1M due to mounting asbestos liabilities and are dropping our price target to $20 from $36.
- On December 5th, a jury in Baltimore, Maryland returned a verdict against Dresser and other defendants, of which the company's share was $30 million.
- This verdict comes on the heels of a $21 million Mississippi jury verdict, a $65 million judgement in Orange, Texas, and an additional $36 million, representing a settlement previously negotiated by Harbison-Walker.
- All of these cases pertain to Harbison-Walker, a former subsidiary.
- The company has indicated that in all cases that it believes the trial courts have committed numerous errors, and that it expects to prevail on appeal.
- While the stock heavily discounts Halliburton's asbestos exposure, the specter of lawsuits spiraling out of control is likely to adversely impact the stock for the foreseeable future, and thus we cannot recommend it at this time.

FUNDAMENTALS

P/E (12/01E)	15.8x
P/E (12/02E)	18.1x
TEV/EBITDA (12/01E)	9.0x
TEV/EBITDA (12/02E)	9.9x
Book Value/Share (12/01E)	$11.18
Price/Book Value	1.9x
Dividend/Yield (12/01E)	$0.50/2.4%
Revenue (12/01E)	$12,940.7 mil.
Proj. Long-Term EPS Growth	NA
ROE (12/01E)	12.9%
Long-Term Debt to Capital(a)	26.8%

HAL is in the S&P 500® Index.

(a) Data as of most recent quarter

SHARE DATA

Price (12/6/01)	$20.85
52-Week Range	$49.20-$19.70
Shares Outstanding(a)	430.0 mil.
Convertible	No

RECOMMENDATION

Current Rating	**3H**
Prior Rating	1M
Current Target Price	**$20.00**
Previous Target Price	$36.00

EARNINGS PER SHARE

FY ends		1Q	2Q	3Q	4Q	Full Year
12/00A	**Actual**	**$0.11A**	**$0.17A**	**$0.24A**	**$0.28A**	**$0.80A**
12/01E	**Current**	**$0.20A**	**$0.33A**	**$0.42A**	**$0.36E**	**$1.32E**
	Previous	$0.20A	$0.33A	$0.42A	$0.36E	$1.32E
12/02E	**Current**	**$0.30E**	**$0.27E**	**$0.27E**	**$0.31E**	**$1.15E**
	Previous	$0.30E	$0.27E	$0.27E	$0.31E	$1.15E
12/03E	**Current**	**NA**	**NA**	**NA**	**NA**	**$1.60E**
	Previous	NA	NA	NA	NA	$1.60E

First Call Consensus EPS: 12/01E $1.31; 12/02E $1.33; 12/03E NA

OPINION

Halliburton filed an 8K indicating that it had received an adverse Jury verdict, of which its share was $30 million. The plaintiffs were all sick with Cancer allegedly due to exposure to Harbison-Walker Refractories products. This verdict comes after three other recent large awards over the past several months totaling $122 million. The company has indicated that in all cases that it believes the trial courts have committed numerous errors, and that it expects to prevail on appeal. While we believe that the stock currently discounts massive asbestos liabilities, the specter of lawsuits spiraling out of control, much like those at other asbestos defendants, is likely to negatively impact stock performance for the foreseeable future, and thus cannot recommend it to investors at this time. Accordingly we are downgrading the stock to 3H from 1M. We are further dropping our price target to $20 from $36, based on 12x our 2005 EPS estimate of $2.65, discounted back at 22%. We dropped our earnings multiple from 21x to 12x and raised our discount rate to 22% from 19% due to the uncertainty surrounding the asbestos liabilities.

A member of citigroup

BACKGROUND

On October 30th, a Mississippi jury had awarded $150 million in compensatory damages to six plaintiffs in an asbestos suit. Halliburton's share of the verdict was $21.25 million pertaining to two of the plaintiffs. The company will file motions to have the verdict set aside and will appeal if these motions are not successful. Among the likely arguments is that the Harbison-Walker products to which the plaintiffs claimed exposure did not exist.

In August, an Orange, Texas jury found in favor of five plaintiffs and warded $15 million in compensatory damages and $50 million in punitive damages. All five of the plaintiffs had cancer, ostensibly as a result of their exposure to asbestos contained in Harbison-Walker products. This verdict was subsequently announced concurrently with the Mississippi verdict and was entered as a judgement on November 29, 2001. In this case, the company believes that the trial court committed numerous errors, including the application of Alabama law and its evidentiary rulings during the trial, in addition to denying Halliburton the right to present evidence that the alleged injuries of the plaintiffs were caused by the products of other companies that had previously settled with the plaintiffs, as opposed to those of Harbison-Walker. Separately, the same court held Halliburton liable for a $36 million settlement that had been previously negotiated by Harbison-Walker. Despite not being a party to the settlement, the court found Dresser liable to pay the settlement, and denied the company the right to defend itself in a hearing. The company plans to appeal both rulings.

ANALYSIS

In our report on August 22, 2001, we review the nature of the asbestos liabilities at Halliburton. To paraphrase, there are four buckets (actually three and a half). First are claims related to Brown & Root construction projects, second are claims related to refractory products made by Harbison-Walker (H-W), and third are other former Dresser Industries products. The H-W claims fall into two categories, those filed before the 1992 spin-off of H-W for which Dresser (now Halliburton) retained responsibility, and those filed after for which H-W was supposed to be responsible. The second quarter charge was taken to reserve for the potential that H-W may fail to fulfill its responsibility due to financial constraints. The charge was figured by taking the best estimate of the H-W cases still outstanding and multiplying by its historical settlement rate and insurance recovery rate. The H-W settlement rate has been considerably higher than Halliburton's average $750/claim (by nearly a factor of ten), but its insurance recovery, at 90%, has been higher than the Halliburton average. Halliburton has an historical average net payout of approximately $200/claim over the roughly 175,000 claims it has settled.

The issue for investors is assessing the risk that in the future either the rate at which new claims are filed against the company increases, or that the net payout per claim increases - or both. Concerns on the first point were heightened by the June 10Q disclosure that almost as many claims were filed against the company in the first half of this year as in all of last year (close to 50,000). These concerns should have been moderated by the third quarter disclosure that the claims rate had fallen back to the year ago rate in the quarter. However, this is an example of where the absence of historical quarterly claims filed data limits the analysis of the new information.

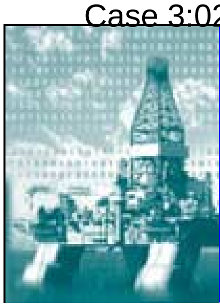
Concerns on the second point have been dramatically exacerbated of late by the recent jury awards, which are by far the largest in Halliburton's history. Legal advisors generally prefer to say less than more, and the company has had jury awards made against it in the past, that were subsequently set aside or substantially reduced, however they were substantially smaller than these recent cases.

We continue to monitor the situation closely and we recognize the unpredictability and apparent irrationality of the asbestos litigation environment in general. For example, at least 95% of the claims filed against Halliburton are by claimants that have no symptoms of illness and a very small fraction, under 3%, have diagnosed cancer. Notably, the claimants in

both the Orange, Texas case and the Baltimore, Maryland case all had been diagnosed with cancer. In addition, each case that is filed against Halliburton has many other co-defendants, creating a degree of competition between defendants to avoid being tagged with a liability. However, because of these factors and others, we cannot confidently develop a "worst case scenario" for Halliburton's ultimate asbestos liability. While the company has recently improved its disclosure dramatically, the absence of some historical information does complicate the determination of whether the situation is deteriorating or not, and if so is it significant. We can, however, do the math that if one projected a net liability of $5B for Halliburton over the next 10 years (assuming current tax rate, etc), the net present value of this liability would equate to approximately $5.40 per share.

COMPANY DESCRIPTION

Halliburton provides a comprehensive scope of products and services in well construction, production infrastructure, engineering and construction, and energy-related capital equipment. The company has been organized into three groups - the Energy Services Group (ES), and Engineering and Construction Group (E&C). The ES Group provides discrete services and products and integrated solutions to customers in the exploration, development and production of oil and gas and has two segments: Halliburton Energy Services (HES), and the midstream operations of the former Brown and Root Energy Services (BRES), combined with Landmark Graphics (LMRK). The E&C group provides services to energy and industrial customers and government entities worldwide and consists of Kellogg, Brown and Root, which includes the marine E&C activities of the former BRES and the former Brown & Root Services.



OILFIELD SERVICES AND EQUIPMENT

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UBS Warburg

RESEARCH NOTE

December 7, 2001

Halliburton Co (HAL-$20.85)

Rating: Hold

Halliburton: Downgraded to Hold from Strong Buy

Key Data	
52-Wk Range	$49-20
Eq.Mkt.Cap.(MM)	$8,953
Sh.Out.(MM)	429.4
Float	100%
Inst.Hldgs.	76.9%
Av.Dly.Vol.(K)	5,409
Curr. Div./Yield	$0.50/2.4%
Sec.Grwth.Rate	NA
12-mo. Tgt Price	$24.00
12-mo. Ret. Pot'l	17.5%
Convertible?	No
Debt/Capital	26.3%

Quarterly Earnings Per Share (fiscal year ends December)

	2000A	**2001E**	*Prev*	**2002E**	*Prev*
1Q	$0.06	$0.20A			
2Q	0.12	0.33A			
3Q	0.18	0.42A			
4Q	0.22	0.36			
Year	**$0.56**	**$1.30**		**$1.28**	
FC Cons.:	$0.57	$1.31		$1.33	
P/E:	37.2x	16.0x		16.3x	
Revs.(MM):	$11,944	$13,035		$12,593	
Cash flow/sh.:	$1.79	$2.63		$2.64	
P/CF:	11.6x	7.9x		7.9x	

Halliburton, through subsidiaries, provides services and products for the exploration, development and production segments of the petroleum industry; and provides engineering, construction, project management, facilities operation and maintenance for industrial and governmental customers.

Earnings exclude all extraordinary and one-time gains and losses.

KEY POINTS

- Halliburton announced another significant adverse jury verdict against its Dresser subsidiary in an asbestos related case in Baltimore, MD. The jury award against Dresser alone is $30 million covering five plaintiffs. This is another case related to Harbison-Walker.
- If this verdict is entered into a judgment, the Baltimore case would bring to $153 million the total in verdicts and judgments against Halliburton in the last two months covering a total of about 50 plaintiffs.
- Our thesis on Halliburton has been that the discount in the stock related to its asbestos liabilities was too great given our analysis of the company's potential future liability on both a gross and net present value basis.
- Since October, the shares are down about 15% and the OSX is up about 5%. While we had cited adverse court verdicts as a primary risk, we did not think that the company would be hit with so many, so quickly, which has changed our view on the stock.
- The company will vigorously appeal these verdicts and is confident that the figures will be reversed or reduced upon appeal. However, the appellate process could take as long as two years, which is outside our current investment time horizon.
- While we do not anticipate that every claim filed against Halliburton will end up in court, in fact the vast majority of claims should continue to be settled at or near the company's historical settlement rates. Nevertheless, if only 1% of cases resulted in jury verdicts of a similar magnitude and the awards were upheld at the appellate level, the future liability would be significantly greater than our previous expectations.
- From a value standpoint, it is arguable that the stock is still quite undervalued. Its valuation discount to its peers is at historically wide levels and we believe its underlying business remains sound despite the near-term weakness in the oilfield service market.

- When all is said and done, we still believe that our analysis and our conclusions are reasonable. However, the current climate is sufficiently uncertain to merit more caution on our part.
- If we were to see several signs that would allow us to believe that the liability is confinable at the level of our previous analysis, we would be inclined to re-evaluate the stock. Since the value gap that results from our previous analysis is so great, we are not uncomfortable missing some of the initial upside if we wait for better signals.
- Therefore, we have lowered our rating to Hold from Strong Buy. We have also reduced our 12-month target price to $24 from $38 based on a lower assumed multiple of normalized earnings.

RISKS

In our opinion, the major risks are as follows: 1) oil and gas prices turn out to be substantially below our current expectations; 2) oil company exploration and development spending does not live up to our expectations of 10–15% growth per year; 3) service industry cost increases outpace price improvements causing undue margin pressure; 4) oilfield valuations, remain mired below historical normal levels; and 5) Halliburton's asbestos liabilities are significantly larger than our estimates, which could cause the company to significantly increase its provisions and perhaps strain its future liquidity.

Additional information available upon request.

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ABN·AMRO

Halliburton Company

Shares Plunge on Asbestos Uncertainty

USA
Oil Services

NYSE: HAL - $12.000

Hold

Flashnote

December 10, 2001

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Market Profile

52-Week Range	$49 - $11	EPS Growth Rate (3-5 Yrs.)	15%
Avg. Daily Volume	8,088 M	ROAE (LTM)	13.1%
Shares Outstanding	429.0 MM	Debt to Total Capital	27%
Market Capitalization	5,148 MM	Book Value Per Share	$10.72
Floating Market Cap.	4,118 MM	Indicated Dividend/Yield	$0.50/4.17%
Institutional Owner.	80%	Revenue (LTM)	$13,067 MM
Insider Holdings	20%		

Earnings/Share

	1Q/Mar	2Q/Jun	3Q/Sep	4Q/Dec	Fiscal Year	Calendar Year	Calendar P/E Ratio
2000	$0.06A	$0.12A	$0.17A	$0.22A	$0.57A	$0.57	21.1x
2001	$0.20A	$0.33A	$0.42A	$0.37E	$1.33E	$1.33	9.0x
2002	$0.35E	$0.32E	$0.31E	$0.36E	$1.35E	$1.35	8.9x

Highlights

- **Halliburton's shares plunged 42.4% on Friday and 44.0% for the week ended December 7, 2001 as negative news regarding the company's asbestos problems poured into the market.**
- **On December 5, 2001, a Maryland court returned a verdict against one of Halliburton's subsidiaries (Dresser Industries), with Halliburton's portion of the ruling being about $30 million (an average of $6 million for each of the five plaintiffs). Each of the plaintiffs had cancer allegedly due to products manufactured by Harbison-Walker (a former subsidiary of Dresser).**
- **This followed recent news that a Texas jury had entered a judgement against Dresser on a $65 million jury verdict (an average of about $13 million per plaintiff), which was also related to Harbison-Walker products.**
- **Both of these recent rulings were for awards that are dramatically above Halliburton's historical average cost per claim of approximately $737 (gross), or $195 net of insurance recovery. This raises significant doubt about the potential liability that Haliburton is exposed to through both current (146,000 pending as of September 30, 2001) and potential asbestos lawsuits.**
- **Management believes that the courts have committed many errors in these cases and is prepared to fight the rulings; management expects these rulings will be reversed in the appeal process.**
- **Notwithstanding the plunge in the shares, we suggest investors avoid accumulating the stock. While value investors may be intrigued and tempted by the stock at current levels, we recommend avoiding the situation given the enormous amount of uncertainty currently facing the company.**

- **We maintain our Hold rating. Our current EPS estimates for 2001 and 2002 are $1.53 and $1.55, respectively.**

Reason for note: Discussion of impact of recent lawsuits on the future of Halliburton's shares.

RBC Capital Markets

Halliburton Company (NYSE:HAL) December 10, 2001
Neutral
OILFIELD SERVICES
Kevin G. Pollard, CFA (214) 989-1404 kgpollard@dainrauscher.com

ASBESTOS LIABILITIES APPEAR UNDER CONTROL...FOR NOW

- While Halliburton's asbestos liabilities appear under control for now, we are concerned that the negative "overhang" will persist for some time.
- We are concerned that the recent spate of unusually large jury verdicts against the company could result in higher settlement demands and a greater willingness to litigate in future plaintiffs.
- We believe the recent sell-off is probably an over-reaction. However, given our inability to quantify the company's future asbestos liabilities, we are maintaining our Neutral rating.

Price:	$12.00
52-Wk Range:	$49 -$10
Tr. 12 ROE:	7.8%
3 Yr EPS Gr.:	NM
Shares Out:	429.00 million
Book Value:	$10.72
Market Cap:	$5.15 billion

Fiscal Yr	**Prev**	**EPS**	**P/E**
Dec/2000A		$0.57	21.1x
Dec/2001E		$1.31	9.2x
Dec/2002E		$1.39	8.6x
2001 Q4		$0.35	

EPS from continuing operations

HAL stock has been under pressure recently following the announcement of several large, asbestos-related jury verdicts against the company. Following the most recent announcement at the end of last week, the stock dropped almost 42%. Since October 30, the company has disclosed four large verdicts totaling over $150 million:

1) On October 26, 2001, a jury in Mississippi rendered a verdict against three companies in favor of six plaintiffs totaling $150 million. Halliburton's share of the verdict is $21.25 million.

2) On November 29, 2001, a Texas jury rendered a $65 million verdict against Halliburton's subsidiary Dresser Industries in favor of five plaintiffs.

3) Also on November 29, 2001, the same Texas court entered three additional judgements against Dresser in the aggregate amount of $35.7 million in favor of 100 other asbestos plaintiffs related to an alleged breach of a purported settlement agreement.

4) On December 5, 2001, a jury in Maryland returned verdicts against Dresser totaling $30 million on behalf of five plaintiffs.

We are not concerned about the effects of these liabilities on Halliburton's financial health at this time. As the company went to great lengths to emphasize during its conference call, the balance sheet is currently very strong, in our opinion, insurance protection is very high, and all of the recent verdicts are expected to be appealed. Our concern relates to future costs associated with these liabilities. Management is very confident and certainly makes a convincing case that all of the recent verdicts will be significantly reduced or overturned on appeal. Following the appeals process, Halliburton has never paid more than $1.8 million to settle a claim. However, awards of this magnitude are well beyond the company's past experiences with asbestos-related trials, and unfortunately, logic and reason do not always prevail in civil trials.

Halliburton's exposure to asbestos liabilities has been well documented over the last year. Indeed, it has been a large factor in our Neutral rating during times of very solid company performance. Since 1976, 340,000 claims have been filed against Halliburton of which 194,000 have been settled for $143 million. After insurance recoveries, the average pretax cost is only about $200 per claim. As of September 30, 2001, Halliburton had 146,000 remaining open claims, up nearly 25% from the beginning of 2001. However, the pace of new claims did moderate some in Q3 with only 13,000 new claims. Management indicates that Q4 levels of new claims and settlements are similar to those witnessed in Q3. Halliburton has accrued net reserves of $125 million for its liability for known asbestos claims.

Going forward, we are concerned that future settlement costs could rise as a result of the large verdicts. We believe the magnitude of the recent verdicts could increase future plaintiffs' settlement demands and willingness to litigate. The company currently has one trial underway with an undisclosed number of trials in Texas, Mississippi, New York, and Maryland scheduled for early next year. Halliburton has deep pockets that, unfortunately, will likely make it a target of plaintiff's attorneys seeking windfall victories well into the foreseeable future.

We believe near-term, potentially negative, asbestos-related events include:

1) Additional large jury verdicts that, by their nature, are unpredictable as to timing and amount.

2) Future charges related to asbestos liabilities as the cost to settle increases above historical levels.

3) A negative Highland Insurance Co. verdict. The Delaware Supreme Court heard Halliburton's appeal of an earlier decision that Highland was not responsible for asbestos claims against Halliburton's subsidiary Brown & Root. A final decision is expected in the next few weeks.

Stock Opinion:
In our opinion, the recent sell-off in the shares is excessive based on the known facts. However, it is the "unknown" when it comes to asbestos liabilities that causes us concern. Despite strong operational results from its core oilfield service business, we believe the specter of more negative asbestos-related news will continue to result in a significant valuation discount vs. the company' peers. Consequently, we are maintaining our Neutral rating.

Company Description:

Kevin G. Pollard, CFA
214 989 1404

Halliburton Company Earnings Model
($ mill)

	2000				2001							
	1st Qtr 2000	**2nd Qtr 2000**	**3rd Qtr 2000**	**4th Qtr 2000**	**1st Qtr 2001**	**2nd Qtr 2001**	**3rd Qtr 2001**	**4th Qtr 2001E**	**1999**	**2000**	**2001E**	**2002E**
Revenues												
Energy Services	$1,723.0	$1,897.0	$2,021.0	$2,275.0	$2,031.0	$2,214.0	$2,309.0	$2,177.1	$6,999.0	$7,916.0	$8,731.1	$8,718.1
Engineering & Construction	$1,136.0	$971.0	$1,003.0	$918.0	$1,113.0	$1,125.0	$1,082.0	$1,100.7	$5,314.0	$4,028.0	$4,420.7	$4,221.7
Total Revenues	2,859.0	2,868.0	3,024.0	3,193.0	3,144.0	3,339.0	3,391.0	3,277.8	12,313.0	11,944.0	13,151.8	12,939.8
Operating Expenses												
Energy Services	1,661.0	1,790.0	1,876.0	2,151.0	1,831.0	1,947.0	1,988.0	1,903.5	6,777.0	7,478.0	7,669.5	7,629.2
Engineering & Construction	1,100.0	935.0	962.0	1,017.0	1,095.0	1,100.0	1,043.0	1,067.7	5,111.0	4,014.0	4,305.7	4,095.0
Special Charges	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	(47.0)	3.0	0.0	0.0
General Corporate	17.0	17.0	17.0	18.0	18.0	18.0	18.0	18.0	71.0	69.0	72.0	72.0
Total Operating Expenses	2,778.0	2,743.0	2,857.0	3,186.0	2,944.0	3,065.0	3,049.0	2,989.3	11,912.0	11,564.0	12,047.3	11,796.3
Operating Income												
Energy Services	62.0	107.0	145.0	124.0	200.0	267.0	321.0	273.5	222.0	438.0	1,061.5	1,088.9
Engineering & Construction	36.0	36.0	41.0	(99.0)	18.0	25.0	39.0	33.0	203.0	14.0	115.0	126.7
Special Charges	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	0.0	0.0	0.0
General Corporate	(17.0)	(17.0)	(17.0)	(18.0)	(20.0)	(20.0)	(18.0)	(18.0)	(71.0)	(69.0)	(76.0)	(72.0)
Total Operating Income	81.0	126.0	169.0	7.0	198.0	272.0	342.0	288.5	401.0	383.0	1,100.5	1,143.5
Other Income												
Interest (expense)	(33.0)	(33.0)	(38.0)	(42.0)	(47.0)	(34.0)	(34.0)	(33.7)	(142.0)	(146.0)	(148.7)	(131.3)
Interest Income	7.0	3.0	6.0	9.0	4.0	6.0	8.0	9.9	75.0	25.0	27.9	57.3
Foreign Currency (loss)	(4.0)	(3.0)	4.0	(2.0)	(3.0)	(1.0)	(2.0)	0.0	(8.0)	(5.0)	(6.0)	0.0
Other Income (loss), net	0.0	0.0	(1.0)	0.0	0.0	0.0	0.0	0.0	(19.0)	(1.0)	0.0	0.0
Total Other Income	(30.0)	(33.0)	(29.0)	(35.0)	(46.0)	(29.0)	(28.0)	(23.7)	(94.0)	(127.0)	(126.7)	(74.0)
EBIT	84.0	126.0	178.0	14.0	199.0	277.0	348.0	298.5	449.0	402.0	1,122.5	1,200.8
EBITDA	206.0	254.0	317.0	153.0	333.0	405.0	480.0	432.8	960.0	930.0	1,650.8	1,742.3
Pretax Income	51.0	93.0	140.0	(28.0)	152.0	243.0	314.0	264.8	307.0	256.0	973.8	1,069.5
Income Taxes	20.0	36.0	53.7	(11.0)	61.0	98.0	126.0	105.9	116.0	98.7	390.9	427.8
	31.0	57.0	86.3	(17.0)	91.0	145.0	188.0	158.9	191.0	157.3	582.9	641.7
Minority Interests	(4.0)	(5.0)	(5.0)	(4.0)	(5.0)	(2.0)	(7.0)	(5.0)	(17.0)	(18.0)	(19.0)	(20.0)
Extraordinary Items & Change i	215.0	0.0	48.7	118.0	1.0	299.0	0.0	0.0	140.0	381.7	300.0	0.0
Discontinued Ops	22.0	23.0	27.0	26.0	22.0	(60.0)	(2.0)	0.0	124.0	98.0	(40.0)	0.0
Net Income	264.0	75.0	157.0	123.0	109.0	382.0	179.0	153.9	438.0	619.0	823.9	621.7
Basic Avg Weighted Shares Ou	442	444	445	435	426	427	428	433	441	442	428	445
Fully diluted shares	444	449	451	435	430	430	429	434	444	445	431	446
Earnings per Share												
Continuing Operations	**$0.06**	**$0.12**	**$0.18**	**$0.22**	**$0.20**	**$0.33**	**$0.42**	**$0.35**	**$0.39**	**$0.57**	**$1.31**	**$1.39**
Discontinued Operations	$0.05	$0.05	$0.06	$0.06	$0.05	($0.14)	($0.00)	$0.00	$0.28	$0.22	($0.09)	$0.00
Extraordinary Items & Accoun	$0.48	$0.00	$0.11	($0.27)	$0.00	$0.70	$0.00	$0.00	$0.32	$0.32	$0.70	$0.00
Net Income	**$0.59**	**$0.17**	**$0.35**	**$0.01**	**$0.25**	**$0.89**	**$0.42**	**$0.35**	**$0.99**	**$1.12**	**$1.91**	**$1.39**
Operating Margin	2.8%	4.4%	5.6%	0.2%	6.3%	8.1%	10.1%	8.8%	3.3%	3.2%	8.4%	8.8%
PreTax Margin	1.8%	3.2%	4.6%	-0.9%	4.8%	7.3%	9.3%	8.1%	2.5%	2.1%	7.4%	8.3%
Tax Rate	39.2%	38.7%	38.3%	39.3%	40.1%	40.3%	40.1%	40.0%	37.8%	38.5%	40.1%	40.0%
Net Margin	9.2%	2.6%	5.2%	3.9%	3.5%	11.4%	5.3%	4.7%	3.6%	5.2%	6.3%	4.8%
DD&A	$122.0	$128.0	$139.0	$139.0	$134.0	$128.0	$132.0	$134.3	$511.0	$528.0	$528.3	$541.5
Cash Flow	$386.0	$203.0	$296.0	$262.0	$243.0	$510.0	$311.0	$288.2	$913.3	$1,149.3	$1,352.2	$1,163.2
CFPS	$0.87	$0.45	$0.66	$0.60	$0.57	$1.19	$0.72	$0.66	$2.06	$2.58	$3.14	$2.61

BEAR STEARNS

Equity Research
Oil Service and Equipment
December 11, 2001

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Halliburton (HAL-$14.00) - Attractive

Provides More Detail on Asbestos Liabilities

Data

Target Price	$20.00	Shares Out	429.4	Book Value	$10.43
Dividend/Yield	3.6%	Market Cap (MM)	$6,011	Net Debt	(1,540.0)

Key Points

*** After a 42% drop in HAL shares on Friday, management spoke to analysts in a conference call yesterday.

*** The company provided additional useful information on its settlements and an update on the fourth quarter.

*** The largest award paid to date is $1.8 million, a fraction of the $131 million in awards announced last week.

*** Halliburton's grounds for appealing recent jury verdicts are strong, but the process will be at least 18 months.

*** The sell-off in HAL shares is overdone, we maintain our Attractive rating, our price target is lowered to $20.

	Earnings Estimates					P/E
	Q1 Mar	**Q2 Jun**	**Q3 Sep**	**Q4 Dec**	**Year**	**Year**
1999	$0.18	$0.19	$0.13	$0.17	$0.47	30.1 x
2000	$0.11	$0.17	$0.23	$0.28	$0.69	20.4 x
2001	$0.20	$0.33	$0.42	$0.32	$1.27	11.0 x
2002					$1.20	11.6 x

	EBITDA Year	EV/ EBITDA
1999	$1.89	5.5 x
2000	$1.95	5.3 x
2001	$3.65	2.9 x
2002	$3.50	3.0 x

"DAMAGE CONTROL" IS IN FULL SWING AT HALLIBURTON

The severity of the sell-off in Halliburton shares last Friday was characterized by CEO Dave Lasar as a major overreaction to the asbestos trial rulings announced last week. Halliburton believes, with justification (in our view), that its ultimate payouts in the three verdicts rendered last week will be a fraction of the $131 million in total assessed damages. Halliburton pointed out numerous errors and faulty judgments that led to the large jury awards. The company will aggressively appeal the verdicts and believes that the verdicts will be dismissed upon appeal.

The company decided to share more information with analysts regarding its 25 year history of settling claims relating to asbestos exposure. The first such claims were filed against the company in 1976 and through September 30, 2001, a total of 194,000 claims have been settled. The largest cash award paid by the company to date was $1.8 million. This amount was paid to a claimant who had

cancer related to asbestos exposure. Out of the 194,000 cases settled to date, 40% were settled with no payment at all. The average payment, which includes the "no payments" as well as the largest payments, is $737 per claim (gross) and $195 per claim (net to Halliburton) after insurance recoveries.

NEW CLAIMS FILED SHOWS NO UP TREND

Halliburton also provided information about the pace of new asbestos claims filed in the current quarter. The pace is approximately the same as in the third quarter, when 13,000 new claims were filed. This is important because in the second quarter of 2001 a total 27,000 claims were filed, prompting fears of a major surge in new claims above historical trends. But it appears that the number of new claims filed in the second half of 2001 will equal the number of claims filed in the second quarter alone. This is an encouraging sign, but it must be viewed cautiously because the recent high damages awards by juries could prompt a resurgence in claims.

It would seem that the average payout of $195 (net to Halliburton) per claim is a low figure that is bound to increase over time. Nonetheless, it does not appear that there will be a sharp, sustained increase in the next few years due to the appeals process that Halliburton will pursue in the wake of the recent large damage awards.

THE STOCK IS TOO CHEAP TO DOWNGRADE

We are maintaining our Attractive rating on Halliburton because the stock is too cheap to downgrade, given the fact that roughly $10 billion in market capitalization already has vanished in response to worries about asbestos exposure. We are, however, lowering our price target to $20 on the view that the stock will recover, but only modestly while the appeals process runs its course. Although it is an excellent oil service company, we expect Halliburton to significantly underperform its peers when a rebound in the sector gets underway.

Halliburton Announces New Structure and Engineering and Construction Charges
12-21-2000
08:59 ET
PR Newswire

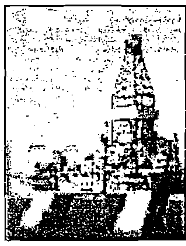
DALLAS, Dec. 21 /PRNewswire/ -- In its third quarter earnings conference call, Halliburton Company (NYSE: HAL) detailed its concerns regarding the poor near term market outlook for the downstream engineering and construction business and its decision to reorganize the engineering and construction business. A consolidating customer base, difficult relationships with certain customers, some financially stressed competitors and a fiercely competitive environment are all factors influencing the reorganization decision and affecting productivity and profitability. By way of contrast, Halliburton Company continues to experience very strong markets in its upstream energy services businesses, especially in North America.
Halliburton Company will operate two business segments in the future: the Halliburton Energy Services Group and the Engineering and Construction Group.
The Halliburton Energy Services Group will include Halliburton Energy Services, Landmark Graphics, large integrated projects that include both surface and sub-surface components, and the following businesses that were formally part of Brown & Root Energy Services -- Halliburton Subsea, Wellstream, Production Services, Granherne, Bredero-Shaw joint venture and the EMC joint venture.
All engineering and construction activities will be consolidated under the Engineering and Construction Group. The upstream oil and gas engineering and construction, fabrication capabilities as well as the traditional engineering and construction business will be under Kellogg Brown & Root management. Individual brand identities will be maintained.
Current business conditions require us to focus on our core engineering and construction competencies of serving the energy, civil and government markets. Our goal is to deliver consistent, predictable, and profitable results. This will result in recording approximately $120 million after tax charges in the fourth quarter related to restructuring and charges on projects of the engineering and construction businesses. Both Brown & Root Energy Services and Kellogg Brown & Root are impacted by the charges and reorganization.
The portion of the charges related to reorganization costs is expected to be approximately $25 million after tax and primarily relate to severance costs associated with a reduction in the number of senior management positions and costs to exit several facilities no longer required, while the remaining charges primarily relate to project specific matters.
During the quarter, several large fixed fee engineering and construction projects, including two projects where Kellogg Brown & Root participates as a member of a construction joint venture, incurred significant additional costs related to projected completion of the projects. Much of the additional costs relate to labor disturbances in Venezuela and West Africa that have significantly affected productivity on the projects. While claims will be made for a large portion of the additional costs, management does not believe that all the claims will be recovered. In addition, negotiations with customers regarding cost increases on seven other projects have not resulted in resolution of certain claims as originally anticipated.
Our goal for the engineering and construction business is to earn a 3 percent margin in 2001 and between 3-5 percent margin in the longer term given the expected market conditions. We believe this new structure will allow us to meet that goal. Our total backlog at the end of November 2000 was $9.7 billion. Approximately $6.5 billion relates to the backlog in the new Engineering and Construction Group businesses and we expect that backlog to be stronger at the end of 2001. We anticipate working off about sixty to sixty- five percent of that level of backlog during 2001.
Due to the ongoing strength of our upstream energy services businesses, fourth quarter 2000 earnings per share are expected to be between $0.25 and $0.27 per diluted share, including discontinued operations but excluding the items discussed above.
Dave Lesar, Halliburton's chairman of the board, president and chief executive officer, said, "We are very disappointed that the high price oil and gas environment has not yet translated to increased spending by our customers on engineering and construction projects. The overwhelming majority of our projects are executed efficiently and profitably. We continue to identify ways to mitigate increased costs and aggressively negotiate claims resolution with our customers. This new structure will allow us to leverage

our businesses more effectively as additional oil and gas engineering and construction project opportunities are planned by our customers.

"On a more positive note, we are very pleased with the continuing strong performance at Halliburton Energy Services, Landmark and Dresser Equipment Group. Our efforts on selling the Dresser Equipment Group are proceeding with bids due this week. We plan to be in negotiations with leading bidders by early in January," Lesar concluded.

The Company also announced that it has now purchased in excess of twenty million shares of its stock under the previously announced stock repurchase plan.

Halliburton Company, founded in 1919, is the world's largest provider of products and services to the petroleum and energy industries. The company serves its customers with a broad range of products and services through its Energy Services Group and Engineering and Construction Group business segments. The company's web site can be accessed at www.halliburton.com.



OILFIELD SERVICES AND EQUIPMENT

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UBS Warburg
RESEARCH NOTE
December 10, 2001

Halliburton Co (HAL-$12.00)

Rating: Hold

Halliburton Provides Update on Asbestos--Discloses Larger Insurance Asset

Key Data	
52-Wk Range	$49-12
Eq.Mkt.Cap.(MM)	$5,153
Sh.Out.(MM)	429.4
Float	100%
Inst.Hldgs.	76.9%
Av.Dly.Vol.(K)	6,619
Curr. Div./Yield	$0.50/4.2%
Sec.Grwth.Rate	NA
12-mo. Tgt Price	$24.00
12-mo. Ret. Pot'l	104.2%
Convertible?	No
Debt/Capital	26.9%

Quarterly Earnings Per Share (fiscal year ends December)

	2000A	2001E	Prev	2002E	Prev
1Q	$0.06	$0.20A			
2Q	0.12	0.33A			
3Q	0.18	0.42A			
4Q	0.22	0.36			
Year	**$0.56**	**$1.30**		**$1.28**	
FC Cons.:	$0.57	$1.31		$1.33	
P/E:	21.4x	9.2x		9.4x	
Revs.(MM):	$11,944	$13,035		$12,593	
Cash flow/sh.:	$1.79	$2.63		$2.64	
P/CF:	6.7x	4.6x		4.5x	

Halliburton, through subsidiaries, provides services and products for the exploration, development and production segments of the petroleum industry; and provides engineering, construction, project management, facilities operation and maintenance for industrial and governmental customers.

Earnings exclude all extraordinary and one-time gains and losses.

KEY POINTS

- Halliburton held a conference call this morning to discuss its asbestos-related liabilities and the recent jury verdicts and court judgments against the company.
- During the call Halliburton reviewed the recent cases in Maryland, Texas and Mississippi, and in all three cases made persuasive arguments as to why it believes these verdicts and judgments will either be reversed on appeal or significantly reduced.
- For the first time, the company disclosed the size of its insurance asset on Dresser-related claims as being at least $2 billion, which is more than twice the size that we had previously assumed.
- HAL also gave details about its most recent settlement history for cases in which the plaintiffs have mesothelioma (most common asbestos-related cancer). In the last 400 cases, the company's average cost per claim is $12,500, which includes a single case for $1.8 million. Excluding this one case (the highest payout in HAL history), the average cost per claim is $8,000.
- The costs on these mesothelioma cases are more than 10x the amount of the average settlement for HAL and people that are sick represent between 5%-10% of all claims filed against the company. However, the concern is that recent judgments could lead to less willingness to settle or higher settlement or payouts in future cases.
- Claims filings in the current quarter continue to show the slowdown trend seen in the third quarter and the company continues to dispose of cases at or near its historical settlement costs.
- The company reiterated and detailed the strength of its balance sheet. The company has $250 million, $700 million in undrawn revolving credit that has been reaffirmed over the past weekend. The debt/capital ratio is still about 27% and the company has no significant off-balance sheet debt or vehicles. Based on our estimates, the company should generate at least $500 million in free cash flow in 2002 and this figure could be low depending on what happens to working capital.

- HAL indicated that it has bought back shares this year and would be willing to buy more stock in at or near current levels once market conditions stabilize.
- In our opinion, the degree to which Halliburton shares declined on December 7, 2001 was likely an overreaction to the news of additional jury verdicts against the company, but the news was the proverbial straw that broke the camel's back, adding significant uncertainty to the ultimate size of the company's liability. It is clear to us that absent the asbestos issue, Halliburton shares are significantly undervalued, but the size of the future liability is more uncertain than we thought as recently as last week. As a result, we are going to maintain our Hold rating on the stock in the near-term as we continue to try to get our arms around this issue. Our 12-month price target is based on a multiple of 'normalized' earnings.

RISKS

In our opinion, the major risks are as follows: 1) oil and gas prices turn out to be substantially below our current expectations; 2) oil company exploration and development spending does not live up to our expectations of 10–15% growth per year; 3) service industry cost increases outpace price improvements causing undue margin pressure; 4) oilfield valuations, remain mired below historical normal levels; and 5) Halliburton's asbestos liabilities are significantly larger than our estimates, which could cause the company to significantly increase its provisions and perhaps strain its future liquidity.

Additional information available upon request.